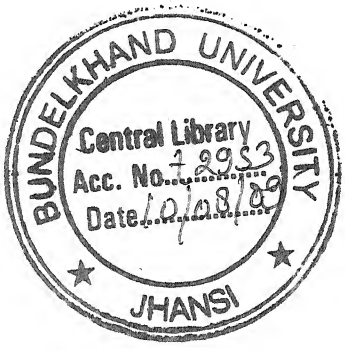
IMPACT OF INFLIBNET PROGRAMME ON IT ORIENTED SERVICES IN UTTAR PRADESH STATE UNIVERSITIES AN EVALUATIVE STUDY



Thesis submitted to the
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For the Award of the Degree of
DOCTOR OF PHILOSOPHY
In
LIBRARY AND INFORMATION SCIENCE

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Certificate

*This is to certify that the work embodied in this thesis entitled, "**Impact of INFLIBNET programme on IT oriented services in Uttar Pradesh State Universities: An evaluative study**" is submitted by **Ms. Archana Upadhyay** for the award of Doctor of Philosophy in Library and Information Science. It is a record of the bonafide research work carried out by her under my supervision and guidance. This work has not been submitted elsewhere for a degree / diploma in any form.*

It is further certified that she has worked with me for the period required under the Ph.D. degree, ordinance-7of the Bundelkhand University, Jhansi.

(Prof. M.T.M Khan)

Declaration

*I do hereby declare that the work embodied in this thesis entitled, "**Impact of INFLIBNET programme on IT oriented services in Uttar Pradesh State Universities: An evaluative study**" is the result of original work done by me.*

This work being submitted to the Bundelkhand University, Jhansi for the consideration of the award of Doctor of Philosophy in Library and Information Science has not been submitted either in whole or in part thereof elsewhere for the consideration of any degree.

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Dated: 17, June 2005.

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Preface

Learning is a great source of refinement. Proper knowledge leads to proper action and proper action leads to progress, prosperity peace and unlimited joy. In a developing country like India with a democratic set up, education plays an important role for the upliftment of the people, for the development of economy and for the advancement of technology to meet the challenges of the present century. Higher education plays an important role in it.

Higher education institutions, which provide opportunities for the development of students potential, are a system, having a number of sub-systems to support and serve its academic programmes effectively and efficiently. One such system is the academic libraries, which are considered as an organ around which all academic activities revolve. These support the programmes of learning, teaching and research in educational institutions. They supplement the work of the teachers and educate and enlighten the students and researchers. An academic library, therefore, is an important education tool in the realm of higher education.

Over the years, factors like Information explosion, price hike of reading materials, shrinking budgets, increased costs involved in the application of modern information technology (IT), etc is becoming more complex to organize the library services. These are basic challenges

faced by library and information professionals. University Libraries are finding it very difficult to meet the ever-growing information needs of the academic community. There appears a gap between the demand and supply of information. Realising this problem, UGC has initiated the INFLIBNET programme with an aim to create a network environment at the national level, so that the libraries can share the resources of one another in a cooperative spirit. The INFLIBNET is a major national effort to improve information access in academic, research and development institutions and other organizations of national importance. INFLIBNET is not just a programme or a system; it is actually a kind of IT movement related to library and information systems in India. Two major initiative UGC/ Infonet and E-subscription from UGC-INFLIBNET will bring radical changes in the university set up and helps in the overall development of higher education in India.

Since its inception, the centre has been involving in various programmes and activities directed towards automation of libraries, information/ documentation centres, establishment of a mechanism for, information transfer and access, supporting scholarship, learning and academic pursuit in the country. It is also aimed at establishing a national network of Libraries and Information centres in Universities, Institutions of higher learning and R & D institutions in India. So far 142 Universities have been covered under the INFLIBNET programme which have been

funded with non-recurring grant of Rs. 6.5 Lakh for infrastructure development, purchase of computers and peripherals and recurring grants for five years to support the salary of Information Scientists, data entry work, maintenance of the systems. INFLIBNET has ambitious plan to connect libraries, scholars and students by providing resources spread across the country using latest information technology tools. Collecting the entire bibliographic sources of academic libraries and providing online access facility in the form of union catalogue of these resources is major objective of the centre. INFLIBNET will make every effort to use all the resources and expertise available at its disposal and help Universities to share the resources effectively. This being a joint effort will be successful only, if both the partners work hand-in-hand.

The following scheme of chapters has been adopted: -

The first chapter ***"Theoretical Formulation"*** includes the general introduction of IT, Advantages and Need of using technology, description of various IT oriented services. The chapter also presents the exhaustive view of INFLIBNET with its various activities. The third aspect included in this chapter is Uttar Pradesh Universities with their description. In the end of this chapter need and purpose, objectives, scope and limitation and hypothesis of the study is presented.

The second chapter is ***"Review of related literature"*** in which a number of published and unpublished work; primary and secondary sources have been surveyed relating to the topic of the study. A detail description of studies already completed on the similar aspects is presented in this chapter.

The third chapter presents the ***"Methodology"*** adopted for the research purpose. This chapter presents the overview of the study.

The fourth chapter ***"Organization of data"*** presents the organized data of the questionnaire; the data is organized in this chapter in several tables.

The fifth chapter contains the ***"Analysis and Interpretation of data"*** of the organized data. The analysis is done using pie charts, bar diagrams, correlation etc. This chapter also includes important findings and problem based on these findings.

The concluding sixth chapter ***"Conclusion and Suggestions"*** contains conclusion and suggestions for effective implementation of INFLIBNET programme so that the quality services will be rendered to users. In the last, suggestions have been given for future research.

Acknowledgement

I express my endless thanks to the almighty who is most merciful, most beneficent, greatest helper who blessed me with strength to complete this work.

It is a privilege to express my profound sense of gratitude and adoration to Prof. M.T.M Khan my venerable mentor, for his incommensurable benevolence, fortitudinous and futuristic outlook, who suggested and supervised me to undertake this work. His constant encouragement, valuable guidance and the precious time he spared, in spite of his academic, administrative and personal commitments, without which it would not have been possible for me envisage and accomplish this task.

It gives me immense pleasure in acknowledging the graciousness and inspiration extended to me by my learned teachers at Bundelkhand University, Jhansi, for their suggestions and co-operation in all respect during the course of my endeavour.

I feel privileged to express my gratitude to Dr. S.P. Singh, University Librarian, CSJMU Kanpur, for urging me frequently to complete the work. I am thankful for his courteousness and goodwill.

I am highly thankful to the learned Librarians of all the State Universities covered under this study who have extended valuable co-operation in conducting field investigation, which happens to be the corner stone of this research work.

I extend my heartfelt thanks to my colleagues and friends for their encouragement and co-operation that enabled me to expedite the work.

It is incumbent upon me to express my deep regards and thankfulness to my father shri Y.K Upadhyay and mother smt. Kusum Upadhyay for their emotional support and encouragement. I appreciate their forbearance and fervour that helped me transpire the phase of the work, as it was their long cherished desire towards my academic achievements, which inspired me throughout my academic career to start and complete an academic project of this nature.

I feel emotionally moved in conveying my personal regards and affection to my grandmother (Dadi) for her valuable care, emotional support displayed during every moment of this project. In fact I have gained at the cost of hardship she has suffered.

I am deeply obliged to thank Er. Amit who, as a true brother has lived up to the expectations that this great Indian culture feels proud of.

He, in spite of his very busy and over burdened schedule stole time to provide me every support without which this work would have never seen the light of the day. Words alone cannot express my thanks to my sister Ruchi who, not only sat by me to extend every possible help but also shouldered my share of responsibilities in household matters.

My thanks are also due to those who have extended the unrewarded help and co-operation in one way or the other during the course of this work.

Archana

(Archana Upadhyay)

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List of Abbreviations and Acronyms

S.No.	Abbreviations	Full Form
1	**A. A. C. R-2**	American Cataloguing Rules 2nd edition.
2	**A. A. I. D. U.**	Allahabad Agricultural Institute Deemed University, Allahabad.
3	**AMC**	Annual Maintenance Contract.
4	**Asstt.**	Assistant.
5	**B. K. U.**	Bundelkhand University, Jhansi.
6	**CALIBER**	Convention on Automation of Libraries in Education and Research Institutions.
7	**CAS**	Current Awareness Service.
8	**CCF**	Common Communication Format.
9	**C. C. S. U.**	Chowdhry Charan Singh University, Meerut.
10	**CD-ROM**	Compact Disc Read Only Memory.
11	**CDS / ISIS**	Computerized Documentation System/ Integrated Set of Information Services.
12	**C.S. J. M. U.**	Chhatrapti Sahuji Maharaj University, Kanpur.
13	**C. S. A. U. A.**	Chandra Shekar Azad University of Agriculture and Technology, Kanpur.
14	**D. D. U. U.**	Deen Dayal Upadhyay University, Gorakhpur.
15	**DDS**	Document Delivery Service.
16	**D.E.I.**	Dayal Bagh Educational Institute.
17	**Dr. B. R. A. U.**	Dr. Bhim Rao Ambedkar University, Agra.
18	**Dr. R. M. L. A. U.**	Dr. Ram Manohar Lohiya Awadh University, Faizabad.
19	**DVD-ROM**	Digital Video Disc Read Only Memory.
20	**ERNET**	Education and Research Network.
21	**HTML**	Hypertext Markup Language.
22	**IASLIC**	Indian Association of Special Libraries and Information Centres.
23	**ICAR**	Indian Council of Agricultural Research.
24	**ICT**	Information and Communication Technology.
25	**ILA**	Indian Library Association.
26	**INFLIBNET**	Information and Library Network.
27	**IRTLA**	INFLIBNET Regional Training Program on Library Automation.
28	**ISO**	International Organization for Standardization.
29	**ISP**	Internet Service Provider.

S.No.	Abbreviations	Full Form
30	I T	Information Technology.
31	IUCAA	Inter University Centre for Astronomy and Astrophysics.
32	Kbps	Kilobyte per second.
33	LAN	Local Area Network.
34	L.C.	Library of Congress.
35	MARC	Machine Readable Catalogue.
36	Mbps	Mega byte per second.
37	M. G. K. V.	Mahatama Gandhi Kashi Vidyapeeth, Varanasi.
38	M. J. P. R. U.	Mahatama Jyotiba Phule Rohilkhand University, Bareilly.
39	MOU	Memorandum of Understanding.
40	N. D. U. A. T.	Narendra Deva University of Agriculture and Technology, Faizabad.
41	NICNET	National Informatics Centre Network.
42	NISCAIR	National Institute of Science Communication and Information Resources.
43	NISSAT	National Information System in Science and Technology.
44	OPAC	Online Public Access Catalogue.
45	PLANNER	Promotion of Library Automation and Networking in North Eastern Region.
46	P. C.	Personal Computer.
47	SDI	Selective Dissemination of Information.
48	SOUL	Software for University Libraries.
49	S. S. V.	Sampurnanand Sanskrit Vishwa Vidhalaya, Varanasi.
50	TQM	Total Quality Management.
51	UGC	University Grants Commission.
52	UNESCO	United Nations Educational Scientific and Cultural Organization.
53	U. P.	Uttar Pradesh.
54	V. B. S. P. U.	Vir Bahadhur Singh Purvanchal University, Jaunpur.
55	V. C	Vice-Chancellor.
56	VSAT	Very Small Aperture Terminal.
57	VSNL	Videsh Sanchar Nigam Limited.

CHAPTER-1

THEORETICA FORMULATION

CHAPTER 1

Theoretical Formulation

(1.1). INTRODUCTION: -

Information, in the present age is considered to be a commodity and resource for national development. Information like any other precious commodity is sold, purchased, exchanged, stored, distributed and exploited for development activities. Revolution in information and communication technology in the past couple of decades had drastic and far-reaching impacts on all aspects of human life. Nowadays, Information technology becomes something so important that we cannot avoid. IT has become a major factor in nearly every aspect of our society. The personal computer has developed into a powerful tool for gathering, manipulating and delivering information. Sophisticated databases allow us to store, collate and access data. Networks and tele-communications technology allow us to deliver and retrieve information for around the world.

The term "Information technology" in English, "Informatique" in French and "Informatika" in Russian encompass the notation of Information handling. The world Information technology is a combination of two words, one is Information and the other is technology; Information means knowledge, it can be a bit of a para or a page. In addition, dictionary definition of technology is

the "Systematic application of scientific and other organized knowledge, skills to practical tasks by use of computer and communication". **UNESCO** defines Information technology as "Scientific, technological and engineering disciplines and the management techniques used in information handling and processing information, their applications; Computers and their interaction with man, machine and associated social, economic and cultural matters".

Information technology is a generic term that covers the acquisition, processing, storage and dissemination of Information. It involves the application of Computer and Communication technology in the task of Information handling and Information flow from the generation to the utilization levels. It is restricted to systems dependant on microelectronics-based combination of Computers and Tele-communication technologies.

(1.1.1) Advantages of using IT: -

(1). Larger data can be handled with care and accuracy.

(2). Operates at a great speed and promptness.

(3). High rate and better quality in performance.

(4). Labour saving.

(5). Cost effective.

(6). Ease in functioning.

(7). Avoids / eliminates duplication of work.

(8). Greater manipulation possible.

The convergence of data, video and telephony technologies and services are changing the boundaries of Information and communication technology. The present age is characterized by reduced distances, shortening of time, digitized sorting and manipulation of information services not tied by any specific delivery system.

Library being an important part of human development process are no exception to this revolution. Libraries are growing organisms marked by continuous increase in their collection, services and users. But the same time isn't always satisfied with resources they are provided with. From the very beginning of their evolution as service organizations they are encountered with scarcity of resources viz. money, space and manpower.

IT has provided a great tool to counter above stated problems by being reliable, speedy and enriched with vivid tools of information, communication and transfer with no geological or physical boundaries. These features have brought libraries to revolution by mechanizing there house keeping activities to relieve the staff from conventional routine administrative and clerical tasks in order to provide smart management and value added user services.

(1.1.2) Why libraries apply technology?

(1). To cope with increasing demands.

(2). To reduce staff or prevent staff increases.

(3). To allow more activities to be performed by clerical and Para-professional staff.

(4). To improve existing services.

(5). To provide new services.

(6). To collect better data to aid overall management of the library.

Information technology is the boon for mankind. It gives accessibility to information at fingertips. The promising and diversified possibilities of information technology have reduced the space and time between people, country, and continent and ultimately have led to the emerging concepts of **'Global Society'** and **'Global Village'**.

(1.1.3) Need of using Information Technology: -

The present society, which requires pinpointed, exhaustive and expeditious information at the right time to the right user, exerts great pressure on the information centers. Therefore, to keep the pace with the information explosion and information society information centers have to use the modern technologies.

The need for excellence in the management of current information services had never been more urgent than it is today, with the exponential growth of information a vast change had come in the role and responsibility of the libraries to manage information dissemination due to rising cost and proliferation technology and science, continuous efforts are required at all levels to keep their professional knowledge up to date, the present day librarians have to keep themselves well informed about contemporary progress made in the field of information technology within and outside the country.

If information technology is not going to be used, then society becomes handicapped because the socio-economic development of a nation depends upon the availability of adequate infrastructure to access the modern information, which is essential ingredient in day-to-day decision-making process. In the present day work environment, the IT is needed in libraries because of the following reasons: -

- The storage and maintenance of huge information in print form has become extremely costly, time consuming and Labour intensive. Printing itself is one of the costliest options now available for disseminating information. The use of optical discs such as CD-ROMs, DVD-ROMs etc. can solve the problem of compact storage.

- Information technology offers means to share resources among the libraries by creating library networks.
- With the support of IT a user need not visit an electronic library. He/She can access it from his/her laboratory, office, house or any other place if he/she has the required computer and communication facilities at the place of work.
- Many users can access databases for any number of times for various purposes at the same time.
- Facilitates the acquisition, storage, retrieval and dissemination of information at much faster rate.
- Facilitates more effective users services and offers more convenience to users.
- Acquiring material in the form of optical disks can solve space problems.
- Advantages like speed, accuracy and reliability in the process of information is possible due to the introduction of IT.
- Due to escalation of prices of periodicals and books, no library can afford to acquire all the publications. This necessitates an active resource sharing among libraries. This is successful only through networking. To participate in resource sharing through the network environment, integration of libraries in computer network is a prerequisite.

- Information, in almost all fields, is growing at a tremendous rate. It is posing a major problem to have bibliographical control of information using traditional methods. This is possible by using computers in bibliographic organisations and control.
- Information seeking behaviour of users is also changing. To cater to their needs, modern methods of information handling should be introduced which may match their current information seeking methods.

The main aim of any library is to provide access to proper and sufficient information matching the actual need of users in shortest possible time. So libraries are seeking technological aids to facilitate and enhance their services to its readers. There are several means of modern technology, which brought in many services to libraries so as to speed up their activities; they include:

- Telecommunication Technology, Telephone, Telex, Videotext, Teletex, Facsimile or Fax.
- E-mail.
- CD-ROM technology.
- On-line retrieval services.
- Library networks.
- Internet.

Technological development have given library managers a wider range of options from which they can select the best mix of facilities and services to meet the needs of their customers in the most cost effective manner. Previously, the quality of a library-tended lot is judged on the basis of the size of its collections of books, journals and other materials. Today, the emphasis has shifted from collection to services, delivery of documents and other information to the customer irrespective of its origin.

(1.1.4). IT Oriented services: -

(1.1.4.1). Internet based services: -

The Internet has provided access to a larger range of information than could ever be made available in one given library. The Internet is most frequently used for reading and sending electronic mail, transferring files, remote login, or telnet, and searching the web.

(a). Electronic mail: -

Electronic mail, or e-mail, allows people to send and receive messages using their computers. E-mail has had a profound influence on the communication patterns of those who use it. It has helped to revolutionize the exchange of information.

(b). Discussion lists: -

In addition to sending and receiving individual messages, e-mail mailing lists are frequently used as the message distribution mechanism for electronic discussion lists or list-serves. A list serve is basically an automated mailing list dedicated to a particular issue or discipline. Generally, members subscribe to a list by submitting their e-mail address to the list software and via the software subsequently receive all messages posted to the list by other subscribers.

(c). Bulletin boards: -

Bulletin Board Systems (BBS) are another Internet application based on shared electronic messages. A Bulletin Board consists of a computer and related software that provide an electronic database where users can login and leave messages or read messages left by others. Bulletin Boards are used mainly for conversation.

(d). Usenet: -

Usenet, also referred to as Netnews, is a collection of hundred of Bulletin Boards which use a common distribution method and similar software to post and read messages.

(e). Free nets: -

Free nets are community-based information systems that offer services ranging from e-mail to information services, interactive communications and conferencing.

(1.1.4.2.). Communication technology based services: -

(a). Fax: -

The facsimile transmission also known as tele facsimile and fax is a means of transmitting a copy of a page of text or graphics to a remote location via telecommunication network. Fax is one possible technology for electronic document delivery.

(b). Teleconferencing: -

Telecommunication can largely be used for teleconferencing and telephone. The communication satellite can increase the effectiveness of teleconferencing through the telephone mediated instructions.

(c). Video conferencing: -

It is a process where by two or more people can communicate interactively both visually and audibly, from remote locations in real time. It may be a substitute of travel.

(d). Videotext: -

The videotext systems transmit text or graphics stored in computer databases via the telephone network for display on a television screen. These are of two types: -

- Broadcast videotext.
- Interactive videotext.

(e). Teletext: -

Teletext systems (i.e. broadcast videotext) however, do not employ sound-coded signals traveling within the relatively narrow band with of telephone circuits. Instead, the coded character signals are sent as part of television picture signals. Teletext services are broadcast information accessed in a non-interactive mode through a TV and telephone line, but tend to be limited in the quantity of information they can carry.

(f). Voice-mail: -

Voice-mail is an audio-based counterpart to e-mail, which uses the telephone system infrastructure as a carrier. Voice-mail is available either as a private service or publicly through the local phone company.

(1.1.4.3). Others: -

(a). Online services: -

An online information retrieval system is one in which a user can, via a computer terminal directly interrogate a machine-readable database. Online system provides rapid access to a broad range of information at a low cost.

(b). CD-ROM search services: -

In the present context CD-ROMS represent a means of access to information. They may be used as an alternative to online access to external database via telecommunication networks, including www. If in case the database recorded on the CD-ROM is a full-text of a document like an encyclopaedia, it can be searched any number of times conveniently and portions of its text can be copied for user's. CD-ROM

databases are designed in such a way that the end user may search them without much difficulty.

(c). Bibliographic database services: -

These services would enable library staff to search bibliographic databases developed/mounted, in order to disseminate current information and retrieve retrospective information. Anticipatory services like SDI and current awareness service and responsive services like literature search and bibliography compilation by downloading could be offered with the help of databases.

(d). Document Delivery Services: -

Document delivery services are those that receive or transmit information electronically. This service enables a library for a copy of a document, to be transmitted via electronic mode. This service may be largely used for transmitting pages from documents, say, journal articles.

Apart from these traditional library services like CAS, SDI, reference service, indexes can also be provided with the help of computer. E-books, E-journals and E-Databases make the information services more electronic.

(1.2). LIBRARY NETWORKS: -

Information today is being produced with such a speed and in such a bulk that even the biggest libraries are not in a position to procure all these. Owing to the situation created by knowledge explosion and consequent flood of information, no library of the world, however big it may be, can think of becoming self sufficient, even in dream. Libraries of today will have to realize and accept that the goal or aspiration of self-sufficiency is delusion, like searching a lake in desert. The goal of self-sufficiency has therefore became unrealistic and an impractical proposition even for the biggest library of the world. It for this reason that some has suggested that the slogan, **"No library can stand alone"**, should be adopted as the **"sixth law"** of Library Science.

The size of recorded information is ever growing whereas space available at the disposal of each library is limited. No library can think of getting additional space every year, although collection will grow continuously. Weeding of books is a small solution but books cannot be weeded out speedily as these are acquired, computer application can solve this problem, as computer is capable of storing huge bulk of information on tiny storage mediums. Computers are the need of the day and library automation is hence necessary for this purpose. With the application of computers to libraries concept of library networking has gained wide popularity.

It has always been assumed that the academicians in an institution of higher learning will have access through journals and books to the whole fund of knowledge generated in the world and will be current to within a few months of actual publication. This assumption is completely invalid in the circumstances that prevail in our country. A large number of Universities have actually stopped subscribing to foreign journals for almost a decade. College have hardly any access to research publications. New books are so expensive that most of these institutions find in very difficult to buy even a small fraction of what should be on their library shelves.

For all the above-mentioned purposes the need to set up an information and library network, which can inter-connect the people, library resources of all Universities, Institutions of higher education and Research laboratories aroused.

(1.2.1). <u>Why library network: -</u>

The library network is essential because of the following factors and reasons:

(1). Exponential growth of literature.

(2). Increase in cost of services.

(3). Scarcity of information.

(4). Rapid fragmentation of knowledge.

(5). Obsolete publication.

(6). Increase variety of user's demand.

(7). People's willingness to share resources.

(8). Decreasing of purchasing power and increasing new service.

(9). To reduce collection of material which they have to access through photocopying, inter-library loan (ILL) and reciprocal borrowing privileges.

(1.2.2). INFLIBNET: -

Universities in India are facing challenges due to budget cut, reduced staff, and devaluation of Indian rupee against major currencies and escalation in cost of foreign publication. There is continuous reduction in the subscription to scholarly journals and services, which affects the research and academic activity. Realizing the need for common mechanism the University Grants Commission constituted a committee on national network system for Universities/Libraries to suggest measures to network libraries in the country, so as to share the literature / resources towards optimum utilization and to avoid duplication in holdings, to the possible extent. **Prof. Yash Pal**, the then chairman of U.G.C. has been the chairman of the committee. The first meeting of the committee was held on 22nd April 1988. The committee, in its meeting decided on constituting a working group on information and library network (INFLIBNET) to prepare a project report within 3 months, for consideration and further action.

INFLIBNET is the culmination of a yearlong effort of an inter-agency group. This group consisting of experts in the area of computers, communication and library and information services was appointed by the University Grants Commission-the major grant providing body for university libraries. At the end of a year long study and after meeting a number of users and experts, the inter agency working group made several recommendations in the year 1988, which are still valid .All of these recommendations deals with one major objective i.e. to facilitate optimum utilization of available resources through various methods by creating an effective delivery mechanism, with the sole aim to support and enhance the quality of academic and research work in the country. With this central objective, INFLIBNET was formed and a humble beginning was made in1991 as a project of IUCAA to implement its set objectives.

INFLIBNET is an autonomous inter-university centre of the **University Grants Commission (UGC)** of India. It is a major National programme initiated by the UGC in **1991** with its Head Quarters at **Gujarat university campus, Ahmedabad**. Initially started as a project under the **IUCAA**, it became an independent inter-university centre on **16th May 1996**.

INFLIBNET is involved in modernizing University Libraries in India and connecting them as well as information centres in the country through a nation-wide high-speed data network using the state-of-art technologies for

the optimum utilization of information. INFLIBNET is set out to be a major player in promoting scholarly communication among academicians and researchers in India.

(1.2.3). Why INFLIBNET: -

- Approximately a total sum of Rs.150 crores per annum is spent towards books and journals by all the libraries concerned with higher education.
- Still a researcher / faculty in any institution is handicapped due to paucity of resources and services offered by his library. It is neither possible nor feasible to fund all the libraries in the country so as to be self-sufficient in meeting fully the needs of their users.
- Instead, if users are enabled to have access to holdings of each other library, the total national resources could be utilised optimally by everyone. This will also ensure that the libraries avoid to a great extent duplication in procuring costly books / journals and aim at developing more unique collection.
- Overall economy and improvement of efficiency as well as minimizing the incidence of financial and other constraints faced at the level of individual libraries are expected to accure from the network.

(1.2.4). Objectives of INFLIBNET: -

INFLIBNET is a computer-communication network for linking libraries and information centres in Universities, Deemed Universities, Institutions of national importance, UGC information centre, R & D institutions and colleges. The main objectives of INFLIBNET are: -

- To evolve a national network, interconnecting various libraries and information centres in the country and to improve capability in information handling and services;
- To provide reliable access to document collection of libraries by creating online union catalogue of monographs, serials and non-book materials (manuscripts, audio-visuals, computer media, etc.) in various libraries of India;
- To provide better access to worthwhile bibliographic information sources, with citations and abstracts, such as periodical articles, conference papers, preprints, technical reports, standards and specifications, patents monographs etc.;
- To provide document delivery service by establishing resource centres around libraries having a rich collection of documents;
- To optimize information resource utilization through shared cataloguing, Inter-library loan services, catalogue production, collection development and avoiding duplication in acquisition to the extent possible;

- To implement computerisation of operations and services in the libraries and information centres of the country, following a uniform standard;
- To facilitate scientific communication amongst Scientists, Engineers, Researchers, Social Scientists, Academicians, Faculties and Students through Electronic mail, Bulletin Board, and File transfer, Computers/Audio/Video Conferencing etc;
- To enable the users distributed all over the country, irrespective of location and distance, to have access to information regarding books, monographs, serials and non-book materials by locating the sources where from available and to obtain it through the facilities of new communication technologies and union catalogue of documents;
- To create databases of projects, institutions and specialists for providing online information service;
- To encourage co-operation among libraries, documentation centres and information centres in the country, so that the resources can be pooled for the benefit of helping the weaker resource centres by stronger ones;
- To develop suitable professional manpower of appropriate quality to establish, manage and sustain the INFLIBNET; and
- To evolve standards and uniform guidelines in techniques, methods, procedures, hardware's and software's, services and so on and promote adoption in actual practice by all libraries, in order to facilitate

pooling, sharing and exchanging resources and facilities towards optimisation.

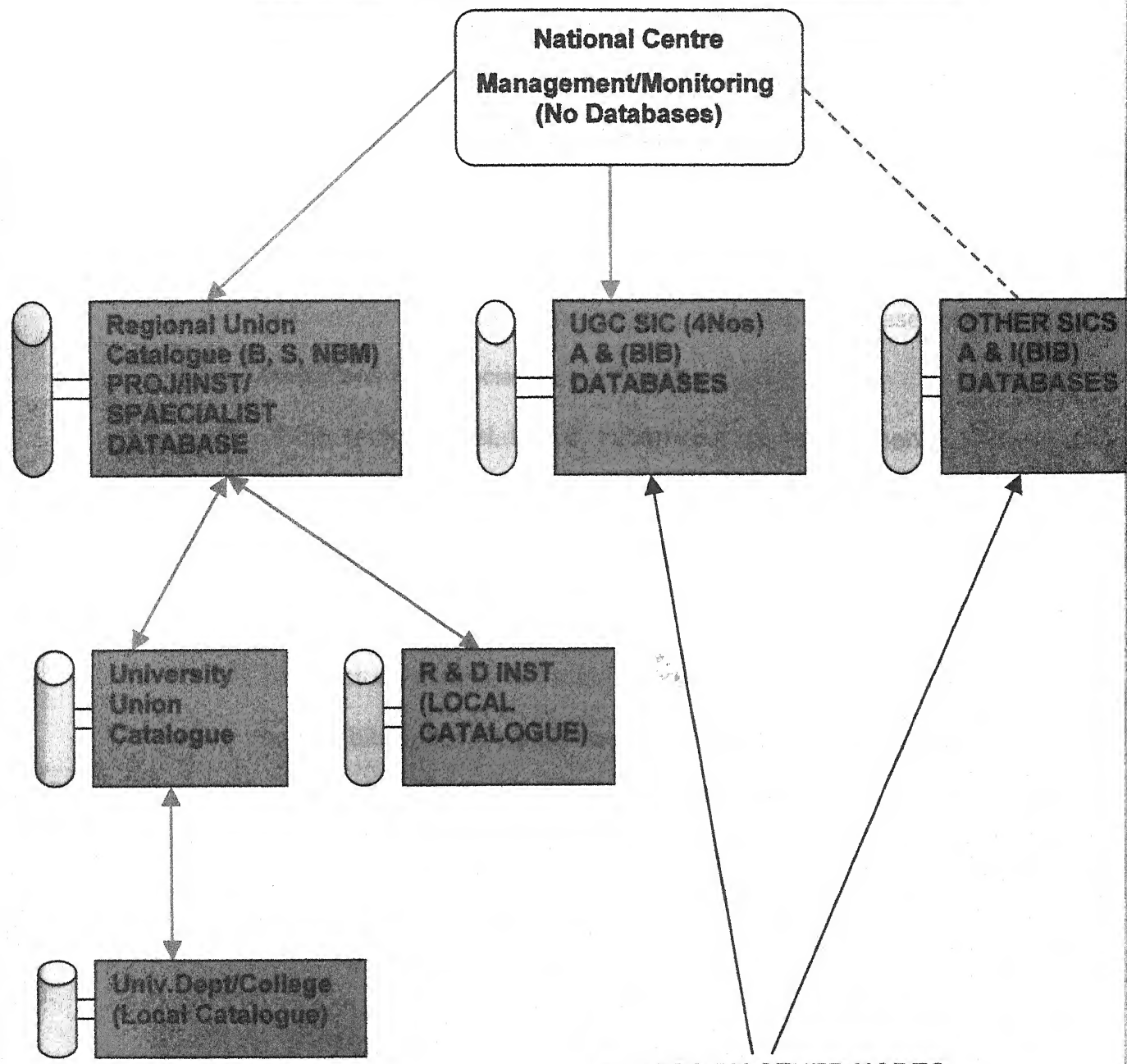
INFLIBNET is expected to improve information transfer and provide the scholars and researchers an easy access to information. Major institutions of higher learning and national organisations like Council of Scientific and Industrial Research (CSIR), Indian Council of Agricultural Research (ICAR), Defence Research & Development Organisation (DRDO), Indian Council of Medical Research (ICMR), Department of Atomic Energy, Department of Electronics (DEO), Department of Telecommunication (DOT), Indira Gandhi Centre of Arts, etc. are participating in INFLIBNET.

(1.2.5). Structure of INFLIBNET: -

The structure and mode of working of INFLIBNET as proposed in the report is as under: -

- INFLIBNET is a versatile, integrated Library and information system. It will operate in different levels-National, Regional, Sectoral and Local.
- The catalogue of libraries will be aggregated bottom upwards i.e., from College/Department to University Library and to Regional centre. Secondary Information/ Database maintenance will be taken care of by sectoral information centre.

INFORMATION ORGANISATION-INFLIBNET



RC	Regional Centre.	_____	Inf. Access/Update.
SIC	Sectoral Inf.Centre.	----------	Cooperative Linkages.
A & I	Abstracting/ Indexing.	_____	Inf. Access only.
B, S, NBM	Books, Serials, Non-Book Material.	_____	Administrative Control.

Fig.1.1

- End users will be served mainly at local level agencies such as College, Department, University and R&D institution. About 400 nodes are planned to be set up initially for this purpose.
- There will be a National Centre for managing, Overseeing and coordinating the affairs of the network and four Regional centres (North, East, West, South) which will maintain union catalogue holdings of libraries in the regions including database of projects, institutions and specialists.
- At the sectoral level, U.G.C. information centres (presently 3 NISSAT sectoral information centres and other centres which perform national level functions and services in specific subjects / disciplines/ missions) are included.
- The sectoral centres will acquire, create and access retrospective and current bibliographic databases and other variety information services.
- As many as 100 University and R&D Institutions libraries will be equipped and developed to solve as document resource centres for purpose of document delivery service.

(1.2.6). Need and usefulness of INFLIBNET: -

The need and usefulness of a project like INFLIBNET may be summarised as under, as given in the INFLIBNET documents prepared by the group: -

- INFLIBNET is a cooperative network and will contribute to pooling of resources, facilities and services of libraries and information centres in the university system as well as in the R&D complexes.
- IT is a major programme towards modernisation of libraries and information centres in the country, with application of computer and communication technologies.
- INFLIBNET is a multiple function/ service network. It will offer catalogue-based services, Database services, Document supply services, and Collection Development and Communication based services.
- Approximately a total sum of 150 crores per annum is spent to towards books and journals by all the libraries concerned with higher education. Still a Researcher/Faculty in any institution is handicapped due to paucity of resources and services offered by his library. It is neither possible nor feasible to fund all the libraries in the country so as to be self-sufficient in meeting fully the needs of their users. Instead, if users are enabled to have access to holdings of each other library the total National Resources could be utilised optimally by everyone. This will also ensure that the libraries avoid to great extent duplication in procuring costly books/journals and aim at developing more unique collection.
- Overall economy and improvement of efficiency as well as minimizing the incidence of financial and other constraints faced at the level of

individual libraries are expected to accure from the academic communities could, through the network, establish instant contact with their counterparts in any part of the country for academic conversation.

(1.2.7). Major Achievements of INFLIBNET: -

(a). Automation of university libraries: -

Realising the importance of this basic necessity, INFLIBNET centre, through U.G.C., has provided grants (initial and recurring, to the Universities identified under the programme. 142 Universities were provided with this grant enabled the University libraries to purchase computers, modem, telephone, printer, air-conditioner, software's (OS) etc. They were also provided with recurring grant for the first five years after the installation of systems to help them maintain the same and convert the collection into machine-readable form. With this INFLIBNET has been able to create an IT conscious environment in the University Libraries.

(b). SOUL SOFTWARE: -

To facilitate automation functions of the participating libraries, SOUL Software has been developed. This Software works in client/ server mode in windows environment using MS-SQL server as back end tool. It also provides

web access. SOUL software supports barcode technology to generate labels. It supports international standards such as MARC 21, CCF, AACR2, ISO 2709 etc. This software is attracting many libraries and has more than 540 installations so far, and many installations are in pipeline. The software is very economical as it is developed and distributed by non-profit organization INFLIBNET, and the features of the software suit any type of library. INFLIBNET has also established SOUL Service centres at three different places viz. Mumbai, Ahmedabad, Delhi. Many more such service centres are likely to be established to support and promote SOUL activities.

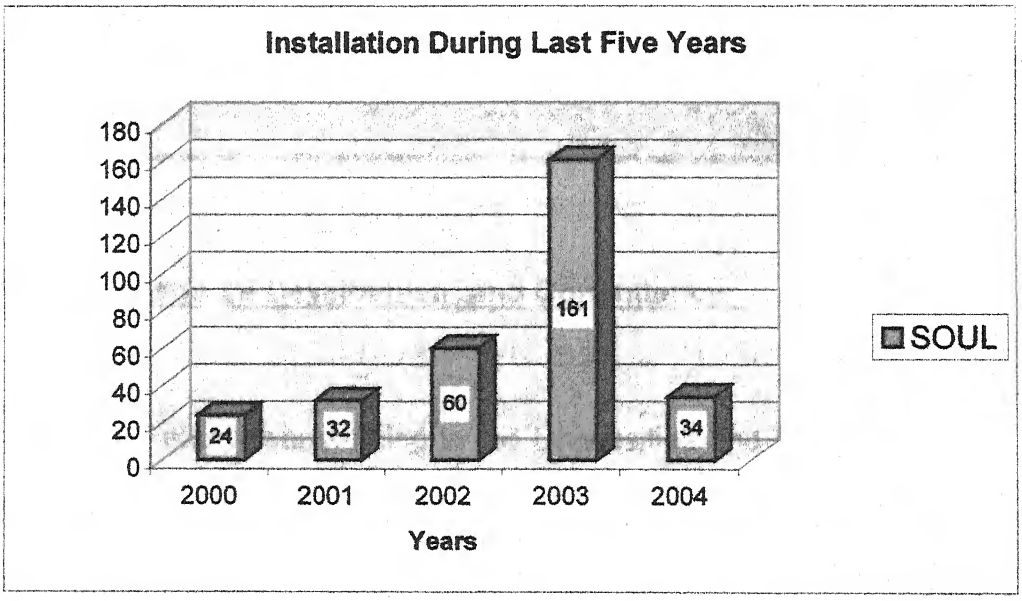
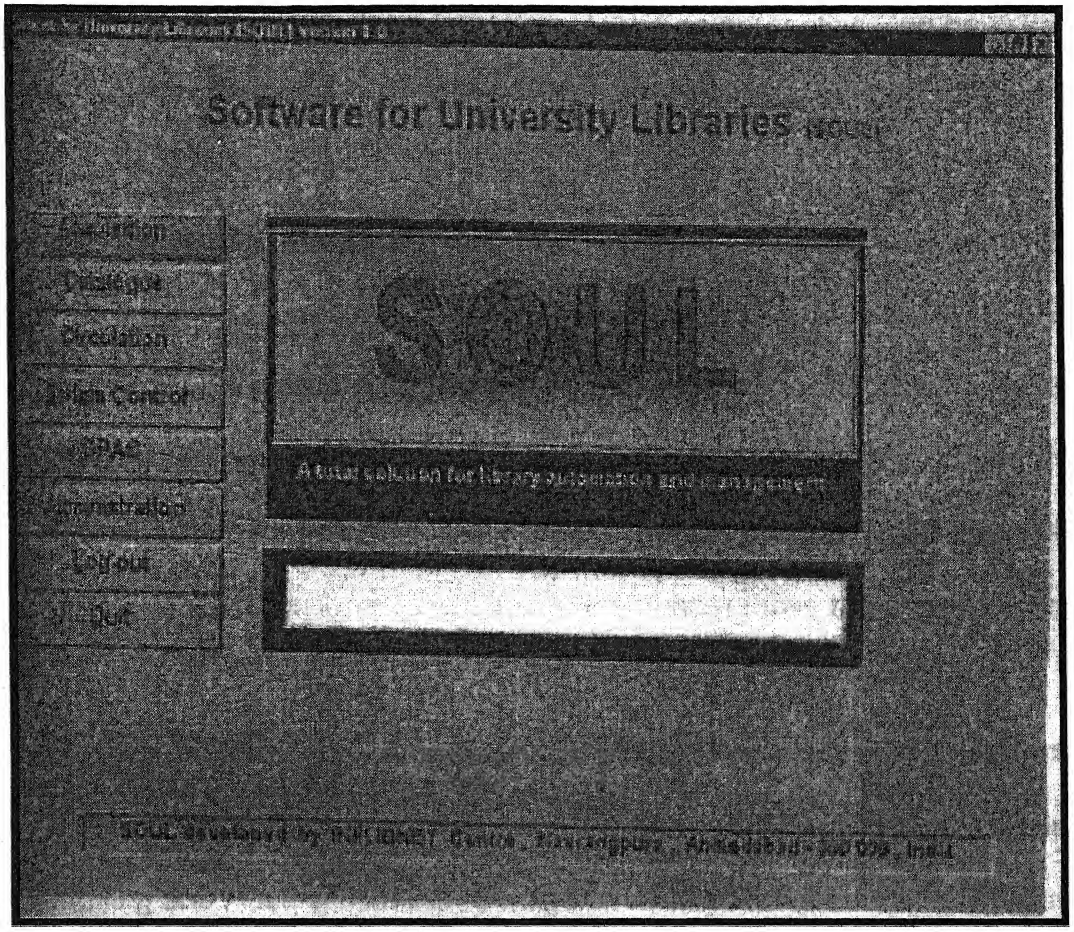


Fig No.1.2



(c). <u>Human Resource Development and Consultancy: -</u>

Training of manpower working in the Universities and Colleges in the use of IT is important. This, being one of the major objectives of INFLIBNET, has been given due priority.

20 training centres of four-week duration for operational staff working in the university libraries and 7 workshops of one-week duration for senior

library staff, focusing on the managing automation and networking have been conducted.

INFLIBNET Regional Training Program on Library Automation (IRTPLA), a new series of training programs are conducted at different locations in collaboration with Universities across the country to train College Librarians at regional level with emphasis on regional languages. More than 44 IRTPLA training programs have been conducted so far. More than 1100 college library professional have been trained under these training programs.

Due to the technological advancement, the center has conducted specialised workshops on Network Management for libraries, Website Designing and Hosting, Network Configuration and Management, E-Resource Management in using UGC-Infonet, orientation programme on awareness of access to e-resource.

Centre has workshop on Library Automation in Hindi for the benefit of Hindi speaking states in the country.

Apart from these courses, several other collaborative training programmes were conducted for All India Radio Libraries, ICSSR / NASSDOC, ICAR-NATP and Kendriya Vidyalayas Sanghatan.

Centre has also conducted collaborative training / Workshop on Digital Library using Dspace at Osmania University, Hyderabad, Birla Institute of Technology, Pilani, Aligarh Muslim University, Aligarh.

Centre has conducted four National, four days seminar on UGC-Infonet and E-Resource in Collaboration with Universities for benefit of faculties, research scholars and students. Attended by more than 1000 participants.

Centre also conducts every year the national convention called **CALIBER-Convention on Automation of Libraries in Education and Research Institutions**, which helps the library professional, as well as IT professional to interact with each other and discuss the burning issues for mutual benefit. 11 such conventions have been held on various topics of interest to profession. This event has got an international status and this year the event will be held during February 2005 at Cochin University of Science and Technology, Cochin.

Though all the libraries in northeastern states have been covered under INFLIBNET program, in order to provide special attention to the problems and issues of these states, the centre is conducting two days program called "**PLANNER**" for the benefit of northeast libraries during the month of November every year.

The centre has also created the post of "Information Scientist".

(d). E-Journal Prints Gateway Archival Library: -

The INFLIBNET Library has also maintaining a National Archive for the print version of e-journals subscribed under U.G.C.-Infonet in its "E-Journal Gateways and Archival library". The intention of Archiving is preservation and they remain accessible even as technology changes. The responsibility of archiving printed journals lies with the libraries. The librarians have to adopt new ventures of forming consortia for this purpose. With the above venture the INFLIBNET Library is maintaining a national archive. The journals are received from the publisher like: The Royal Society of Chemistry (RSC), The Institute of Physics (IOP) and Cambridge University press (CUP). One can access this database on his desktop by using the web site.

(e). Development of Union Databases: -

Development of union database is one of the important activities of the centre. These databases can be accessed online using Internet through INFLIBNET web page at URL http://www.inflibnet.ac.in.

- **Books Database: -**

Received around 80 Lakh records from more than 100 universities and more than 20 Lakh unique records processed from 70 universities and remaining are under process. These records representing holdings of participant libraries under the programme covering both old as well as current books.

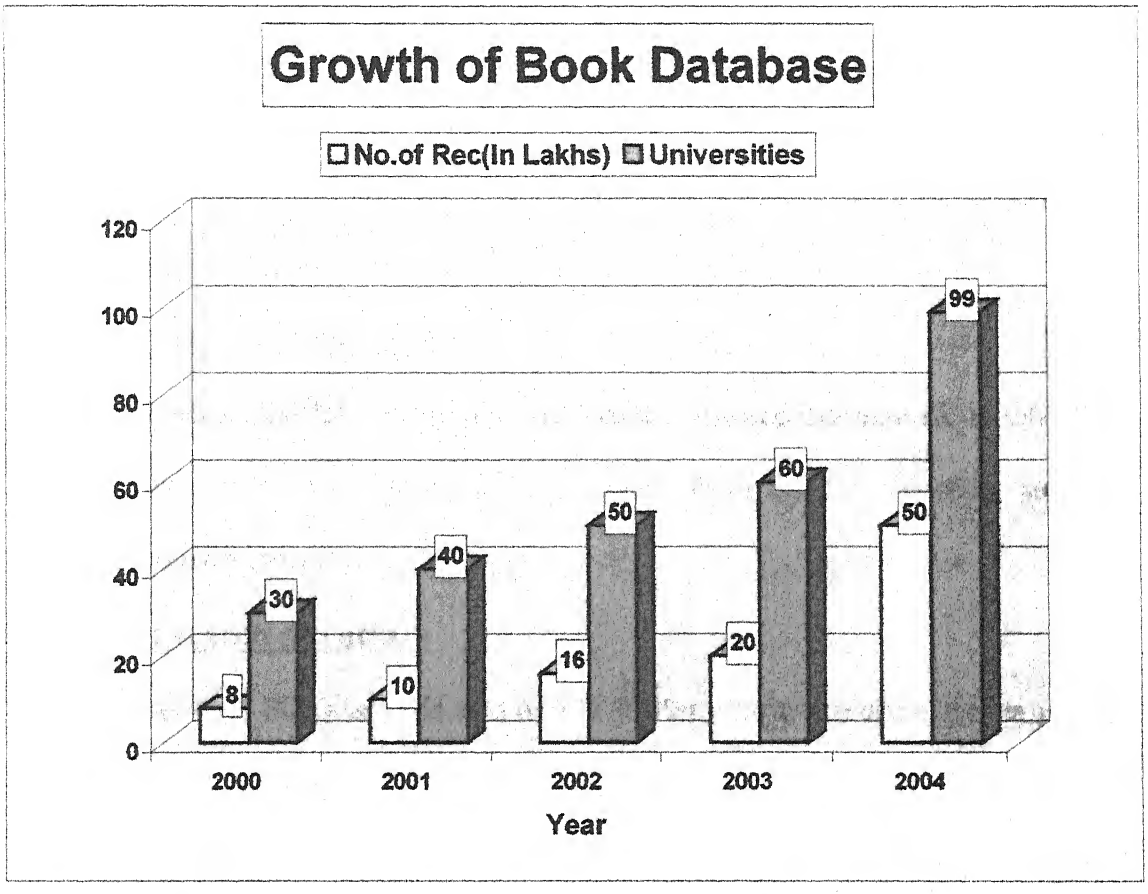


Fig No.1.3

- **Thesis: -**

  Have more than 1.5 Lakh records of doctoral thesis submitted to various Indian Universities till date. Efforts are in progress to include abstracts in this database.

- **Serial Holdings Database: -**

  It has more than 13,751 unique serial titles having over 47,000 holdings of various Universities in the country.

- **Current Serials Database: -**

  Current Serials database is created to provide access to journals currently subscribed by the University Libraries.

- **Experts Database: -**

  Provides useful data relating to the name(s) of the experts in different disciplines. This database has more than 15,000 records, and is growing steadily.

- **Research projects: -**

  Has over 9000 records and nearly 1000 records are under process.

- **NISSAT Project Database: -**

  It has more than 2000 experts' profiles in the area of science and technology and is provided access on the Web http://nissat.inflibnet.ac.in. All these databases are updated on regular basis.

(f). Bibliographic standards: -

To maintain consistency and quality in database created by the participating libraries, each participating library follows the standard adopted by INFLIBNET, which is an effort of the task force comprising experts in this area. The document "INFLIBNET" standards and guidelines for "Data Capturing" are made available to all the libraries. The other standards recommended for this activity are: -

- Anglo American Cataloguing Rules-Rev.2.
- Library of congress subject headings to assign subject headings.
- Libraries following the INFLIBNET standards and SOUL Software will not have any difficulty in converting their records into MARC-21 format.

(g). Retrospective Conversion project for five major libraries: -

To avoid duplication in creation of databases, five major libraries were identified and given the responsibility to convert their manual records into machine-readable forms. These will bring substantial savings, as the same data will be used for retro-conversion of other libraries. These libraries have created fairly good number quality records as prescribed by INFLIBNET guidelines.

(h). Document Delivery Centres of INFLIBNET: -

To fulfill the access gap and provide full text access to serial articles available from the collection of major libraries to all other libraries covered under the programme, centre has established six document delivery centres with minimum hardware and software requirements. Initial grant of Rs.2.85 Lakh was given to these libraries for providing both photocopy and electronic document delivery services. The universities covered under the project are **University of Hyderabad, Indian Institute of Science, Tata Institute of social Sciences, Jawaharlal Nehru University and Banaras Hindu University.**

(i). Information services of the centre: -

To facilitate free flow of information to the end users and develop interaction among academia, various services have been started. These include: -

- **Access to union Databases: -** All the seven databases developed at the centre have been mounted on different servers. These can be accessed using any of the GUI based web browsers at INFLIBNET website at URL: http://www.inflibnet.ac.in.

- **CD-ROM based services to academic databases: -**

To provide the literature published to the end users in their areas of interest, the centre subscribes to a large number of bibliographical databases in CD-ROM mainly in the areas of social sciences and humanities. This service is free of cost.

- **INTERNET based service: -**

  This is provided to limited users who do not have access to Internet resources.

- **INFLIBNET repository using Dspace: -**Centre has digitalized all CALIBER, PIANNER proceedings, course materials, Newsletters, Centre's press clippings and articles of INFLIBNET staff by using DSPACE open source software developed by Microsoft. Presently digital publications can be accessed through website or through given address http://dspace.inflibnet.ac.in/.

(j). Major Project Initiated: -

- NISSAT project on web enabled expert database in science and Technology: (completed).

Experts Database in science and Technology (EDST) is the premier database of profiles of scientists / researchers and other faculty members working at leading R & D and other institutions involved in teaching and research in India .It provides important information about expert's background, contact address, skills and accomplishment .The database is

being developed under the project funded by Department of Scientific and Industrial Research (DSIR) ministry of science and Technology, New Delhi. The database offers the expertise of more than 17,300 faculties from the nation's leading institutions. Web enabled interface has been incorporated to facilitate search and update the names listed in the database. Separate tools to maintain and update this database have been developed by using three-tier architecture.

(k). UGC-Infonet: -

University Grants Commission has launched an ambitions programme to bring about a qualitative change in the academic infrastructure, especially for higher education. Under this initiative UGC is modernizing the University campus with state-of-the-art campus wide networks and setting up its own nationwide communication network named U.G.C.-Infonet. Under this programme it is proposed to use Information and Communication Technology and Internet to transform learning environment from a mono-dimensional one to a multi-dimensional one. U.G.C-Infonet will be a boon to the higher education systems in several ways: -

- **U.G.C-Infonet** will become a vehicle for distance learning to facilitate spread of quality education all over the country.

- **U.G.C-Infonet** will be a tool to distribute education material and journals to the remotest of areas.
- **U.G.C-Infonet** will be resource for researchers and scholars for tapping the most up-to-date information.
- **U.G.C-Infonet** will form a medium for collaboration among teachers and students, not only within the country but also all over the world.
- **U.G.C-Infonet** will be an Intranet for University automation.
- **U.G.C-Infonet** will encompass entire University systems for most efficient utilization of precious network resources.
- **U.G.C-Infonet** will establish a channel for Globalization of Education and facilitate the Universities in marketing their services and developments.

The U.G.C-Infonet will be overlaid on ERNET infrastructure in a manner so as to provide assured quality of service and optimal utilization of bandwidth resources. The network will be run and managed by ERNET India. The project will be funded by U.G.C. with 90% capital investment and up to 100% of recurring costs. A joint technical and tariffs committee, consisting of reading experts in the country has also been set up to guide and monitor the design, implementation and operations of U.G.C-Infonet. INFLIBNET will be monitoring the network to provide assistance to Universities for setting up IT infrastructure. This would help in optimizing the overall data traffic and improve performance. 124 Universities have been provided grant till data

under the scheme to connect under U.G.C-Infonet with bandwidth ranging from 64 kbps to 2 mbps.

(I). UGC-Infonet E-Journals Consortium: -

The UGC has initiated a programme to provide electronic access, over the Internet, to scholarly literature in all areas of learning to the University sector in India. The programme is wholly funded by the UGC and administered and monitored by INFLIBNET. All Universities, which come under UGC's purview, will be members of the programme, and it will gradually be extended to colleges as well. Access to various E-journals were given to selected Universities from January 1,2004.

The programme will increase in a very fundamental way the resources available to the Universities for research and teaching. It will provide the best current and archival periodical literature, from all over the world, to the University community. The programme will go a long way in mitigating the severe shortage of periodicals faced by University libraries for many years, due to the ever-widening gap between the growing demand for literature, and the limits of available resources.

The E-Journals programme aims at covering all fields of learning of relevance to various universities including:

- Arts, Humanities and Social Science.
- Physical and Chemical Sciences.
- Life Sciences.
- Computer Science, Mathematics, Statistics.

The literature made available will include journals covering research articles, reviews and abstracting databases. Access will be provided to current and archival literature. Portals will be provided which will enable users to navigate easily through all the literature that is made available. The UGC-Infonet E-Journals are available to 50 Universities / Institutions as per the recommendations of the National Negotiating Committee. All electronic resources are accessible from the publisher's Website.

S.No.	Name of the Publisher	No. of Journals/Database	No. of Universities
1.	American Chemical Society	31	50
2.	Royal Society of Chemistry	23 Journals + 6 Databases	50
3(i).	Chemical Abstracts Services (Sci-finder Scholar)	One Database	10
3(ii).	Chemical Abstracts-STN Service	One Database	100
4.	Nature Publishing Group	One Journal	50

5.	Institute of Physics Publishing (IOPP)	36 Journals	50
6.	Cambridge University Press	72 Journals	50
7.	Project Muse	222 Journals	50
8.	Biological Abstracts – BIOSIS	One Database	50
9.	Encyclopeadia Britannica	National Site Licensing	All Academic Institutions
10.	JSTOR-Archival Access	293 Journals (Arts & Science I & II, General Science, Languages & Linguistics)	24
11.	American Institute of Physics	19 Journals Including AIP Society Package-II Titles	50
12.	American Physical Society	8 Journals	50
13.	Science Online	One Journal	50
14.	Springer and Kluwer Publication	Subscriptions to 200 Journals but the access for All 1200 Journals in the Initial one year	50 + 50 Universities will have trail access
15.	Elsevier Science-Life Sciences	34 Journals in current trends, opinions, cell press	50
16.	Emerald Library Science Collections	28 Journals	30
17.	Annual Reviews	29 Journals	50
18.	Gateway Portals	Cover more than 10,000 Journals up to abstract level	56 Universities for one year

Looking at the systematic approach of UGC-Infonet E-Journals Consortium, many publishers offered free trail access for two to three months shows academic interest to become a part of UGC-Infonet.

(m). Training and Orientation programmes on E-Resource Management: -

Four training programs on E-Resource management using UGC-Infonet were held at INFLIBNET over the last one-year. One-day user awareness programmes were executed at 37 Universities across the country. Similar programme are planned in near future at many more Universities.

(n). Informatics activities: -

- E-Journal/Database subscription to universities.
- CD-ROM and Internet based services to the research and academic community.
- Access to services: OCLC first search, chemical abstracts etc.
- Access to union databases of INFLIBNET for offline requests.
- Electronic Document Delivery Services.
- Conducting regional meetings on E-Journals.
- Subscription to E-Journals/ databases in all areas based on the recommendations of National Committee set up by the UGC.

- Creation and maintenance of the website for e-journals subscription activity of the centre.
- Identification of E-Resources in the remaining subjects and work towards the implementation.
- Conducting E-Resource management training course at INFLIBNET for all the universities covered under UGC-Infonet program.
- Coordinate several user awareness courses (gross root level, across the country regarding the usage of e-resources.
- Administer, monitor and maintain e-subscription activity.
- Generate statistics time to time on the usage of e-resources.
- Contents of periodicals in science and technology (COPSAT).

(o). <u>University Home Pages: -</u>

The INFLIBNET centre has taken upon itself to develop a University Information System covering the information related to academic activities of each University. This work is being handled with an objective to provide maximum and up to date information about various courses conducted, facilities available, faculty information, eligibility criteria for admissions etc. The information relating to all of this is called from the respective Universities and organized and placed in a structured format using HTML format. Currently, there are 28 Universities home pages mounted on INFLIBNET server. This service is being handled by INFLIBNET to promote the academic information on the network especially of those Universities, who at present do

not have facility to host such information on their own server. A copy of the same is being provided to Universities for mounting on their own website.

Web pages of 28 Universities created and mounted on the INFLIBNET web server and hyperlink are also provided to more than 100 other Universities home pages to search the web pages of Universities, one may use the URL http: /www. inflibnet. ac .in .

(p). MARC 21 Implementation: -

Ministry of Human Resources & Development (MHRD), Govt. of India visualizes building up of a national database of library holdings in the country. All libraries are expected to contribute their data to this national database. For putting this plan into action, MHRD desires that all libraries in the country should follow a uniform standard for data entry. The sub-group has recommended the MARC-21 format be followed now onwards for data entry in libraries. The main reason for preferring MARC21 to CCF and other formats was that most of the countries in the world use MARC and it is comprehensive having number fields. Also there is a constant development taking place in MARC21 and is updated regularly whereas CCF has became

stagnant. With MARC21 based national database, it will be easier to exchange data with other countries.

The sub-group also advised INFLIBNET centre to adopt MARC21 and inform all University Libraries about this decision and to ask them to use MARC21. Accordingly, all libraries covered under INFLIBNET are advised to start asking MARC21. For libraries using SOUL SOFTWARE, there is no cause for any alarm over this decision. INFLIBNET centre has already developed interface software for exporting data from SOUL to MARC21 incorporating all primary fields identified by the sub-group. INFLIBNET has already initiated work on developing another interface for importing data from MARC21 to SOUL.

(q). <u>Publications of the centre: -</u>

- Quarterly Newsletter titled "INFLIBNET NEWSLETTER" is being published since 1995 to create awareness among the professionals about the activities of INFLIBNET.
- Guidelines for data capturing manual.
- CALIBER proceedings are brought out every year.
- Information Brochures, course material.
- Union catalogue of secondary serials.
- Union catalogue of current serials of document delivery centres.

- Annual reports.
- INFLIBNET Directory of Indian universities accessible through INFLIBNET Website (http://libserver. inflibnet. ac. in: 8080 /www. isis /add.01/ form.htm)
- PLANNER proceedings (Annual publication).

(1.3). UTTAR PRADESH UNIVERSITIES: -

In a developing country like India with a democratic setup, education plays an important role for the upliftment of the people, for the development of the economy and for the advancement of the technology to meet the challenges of the 21st century. Therefore, preference has been given to the educational development so libraries are primarily important because they are reservoirs of knowledge. These constitute a direct incentive to the development of educational, social and cultural activities. They contribute immensely to the arousal of public interest in day-to-day affairs by facilitating exchange of knowledge among different sections of people.

In India there are 273 University level institutions including 52 Deemed Universities, 40 Agricultural Universities, 162 Traditional Universities, 33 Technical, 18 Medical, 3 IT, 1 Journalism, 6 Law and 10 Open Universities.

Karl Jaspers describes the University as a "community of scholars and students engaged in the task of seeking truth". To Lord Ann "it exits first to promote through reflection and research the life of the mind; second to transmit high culture to each generation. Whatever is thought to be intellectually important and concern to society it teaches to new students".

Education is not confined to elementary and secondary education only. Rather higher education is more important because it would develop thinking individuals who should prove to be self-reliant person in every walk of life. It would not be an exaggeration if it is said that a library is an essential pre-requisite for successful implementation of higher educational programmes. A University, in order to achieve its aims, takes the help of its library. It has rightly been said," A University is as good as its library".

The Kothari Education Commission (1964-66) was very much pertinent about the importance of a library in an educational institution when it pointed out that, "Nothing could be more damaging to a growing department than to neglect its library or give it a low priority on the contrary, the library should be an important centre of attraction on the College and University campus".

Realising the need of Universities in higher education the largest state of India "Uttar Pradesh" also established many Universities in the state with their libraries established at the same time or later. In Uttar Pradesh there are 20 Universities and University like institutions. The following table presents the detail of U.P. Universities: -

S. No	Name of the University	Est. Year	Status
1	A.A.I. Deemed University, Naini, Allahabad	1910	Deemed University
2	Aligarh Muslim University, Aligarh	1920	Central University
3	BabaSaheb Bhimrao Ambedkar University, Lucknow	1994	Central University
4	Banaras Hindu University, Varanasi	1916	Central University
5	Bundelkhand University, Jhansi.	1975	State University
6	Central Institute of Higher Tibetan Studies, Varanasi.	1959	Central Institute.
7	Chaudhary Charan Singh University, Meerut.	1967	State University
8	Chhatrapati Sahuji Maharaj University, Kanpur.	1965	State University
9	Chandra Shekhar Azad University of Agriculture And Technology, Kanpur.	1975	Agricultural University
10	Dayal Bagh Educational Institute, Agra.	1981	Deemed University.
11	Deen Dayal Upadhyay University, Gorakhpur	1957	State University
12	Dr.Bhim Rao Ambedkar University, Agra.	1927	State University
13	Dr.Ram Manohar Lohia Avadh University, Faizabad.	1975	State University
14	Mahatma Gandhi Kashi Vidyapeeth, Varanasi.	1929	State University
15	MJP Rohilkhand University, Bareilly.	1975	State University
16	Narendra Deva University of Agriculture And Technology, Faizabad.	1975	Agricultural University
17	Sampurnanand Sanskrit Vishwa-Vidhyalaya Varanasi.	1958	State University
18	University of Allahabad, Allahabad.	1887	Central University
19	University of Lucknow, Lucknow.	1921	State University

Table No.1.1

(1.3.1). Academic Libraries: -

Academic institutions, which give opportunities for the development of students potential, are a system having a number of sub-systems to support and serve its academic programmes effectively and efficiently. One such system is the academic libraries, which are considered an organ around which all academic activities revolve. These support the programmes of learning, teaching and research in educational institutions. They supplement the work of the teachers and educate and enlighten the students and researchers. An academic library, therefore, is an important educational tool in the realm of higher education. They are the centres of any academic setting because classroom teaching provides a glimpse of knowledge; the libraries disseminate a wide range of knowledge, which are required to attain intellectual heights.

Academic libraries have been in existence in India since earlier times, but their proper development took place in the twentieth century only. The reasons for their slow growth include late recognition of the importance of the academic libraries, paucity of funds for their development, lack of training of library personnel and lack of status for the profession. The establishment of UGC in 1953 is an important landmark in the growth and development of the academic libraries in India. But the

situation at present is also not satisfactory. The reasons for their pathetic situations are: -

(1). Rapid increase in the price of journal, books etc

(2). Discrimination of prices

(3). Devaluation of rupee

(4). Conversion rates

(5). Increasing number of publications

(6). Increasing staff salaries

(7). Heavy cut into budgets

(8). High cost of IT and related products

(1.3.1.1). Indian Library's scenario when INFLIBNET was started: -

At on 1988, there are 179 University level institutions and over 5500 Colleges with over 2,25,000 faculty staff and 40 Lakh students of which about 40,000 are research scholars and over 3,50,000 are post-graduate students. Some Universities are old and were established in the later half of last century, while a few have been founded in eighty's. The teaching and research in Universities are centered around their libraries. The University Libraries are not uniform in their level of development. There exists neither a network nor telecommunication link to inter-connect them.

Even though the University Library should be expected to help the College Libraries in their development and to establish linkages with them, there does not exist, any inter-connection.

(1.3.1.2). Library Automation in India at that time: -

There have been many attempts in the country during 1960's and 1970's for computer application to library and information activities. However, it is only during 1980's, libraries and information centres have become more earnest to computerize their operations and services. With the advent of low cost microcomputers, the libraries and information centres are now encouraged to switch over to computerization. There is also an enthusiasm among the professionals to get trained in library automation.

Automation being carried out by libraries is usually in acquisition, serials control, cataloguing, and circulation and management statistics. The libraries in these areas have made some progress. A few institutions are creating and managing bibliographic databases in machine-readable form and bringing out lists, catalogues, union catalogues etc. They offer current awareness service also.

Serious attention is now being paid to training aspect for developing skills in computer applications among the library and information manpower. A favorable condition is that the library and information personnel are now increasingly interested in getting trained for acquiring skill and knowledge in computer application.

(1.3.2). Need and purpose of the study: -

Needless to say that the age we live in is witnessing a very speedy advancement in the world technology. We are covering years in days and centuries in decades. A little lethargy may leave us far behind in this race of progress. That is why; there is always a need to revamp the institution of education vis-à-vis the fast changing scenario of the world.

The new technology has made a deep impact on the academic libraries. Now days the emphasis in libraries is shifting from collection to access. Today academic libraries are in transition from manual to electronic system. However academic libraries in India are comforting with so many problems such as increasing cost of library material, changing formats of reading material, stagnant or shirking library budgets, huge cost involved in library automation, increase in the number of users and demand for better, faster, efficient information services for the users. These problems have really created a gap between the demand and

supply of information. It is only through sharing of resources that we may be able to bridge the gap between the user (demand) and providers (supply) of information.

The following problems may be identified that come in the way of application of IT in Indian university libraries.

- Lack of financial resources.
- Lack of manpower resources.
- Lack of positive attitude by the library staff towards IT applications.
- Lack of knowledge and training of the staff.
- Lack of awareness about the possible benefits of IT applications.

The answer/solution for the above problems emerged in the form of **INFLIBNET** programme. When this programme was initiated, hardly any university library had computers. Therefore, under this programme UGC started providing one time full grant of 6.5 Lakh for infrastructure requirement. These universities are also being provided with recurring grant to take care of expenditure involved in making progress in automation and networking. This grant is divided into five categories viz. salary of information scientist, database creation, telephone charges (network usage), consumable and computer maintenance.

With the help of this programme recent landmark in the advancement of University and College Libraries of Uttar Pradesh has been emerged in the form of modernization of their information services and other facilities. As a result, the effective implementation of new and emerging information technologies have broadened the access to existing resources, besides helping our libraries to achieve optimum utilisation and expand the base of information services to the user community. With a result, we now see, a much greater emphasis for access to information from wherever it is located rather than trying to own everything. Therefore, resource sharing among the libraries using network and access to information has now become much more practical than it was even before. It is in this changing scenario that the INFLIBNET has emerged as a front runner, facilitating automation and networking of University Libraries in India and trying to lay a strong foundation for resource sharing and providing network based information services among all academic and research libraries.

The present study is a step towards evaluating the "**Impact of INFLIBNET programme on Information Technology oriented services in Uttar Pradesh State Universities: An Evaluative study",** in order to identify the strength so as to develop them further, the weakness so as to remove them, the opportunities so as to avail them and the threats so as to ward them off. The need of the present study is described in the following points: -

(1). To create awareness about INFLIBNET programme.

(2). To solve the problems faced by libraries in the implementation of this programme.

(3). To improve the existing conditions and to welcome actions for the future.

(4). To know the feasibility of the programme.

(5). To evaluate the impact of this programme on services so as to add new dimensions to them and provide new services.

(6). It is needed for reducing /eliminating the duplication in acquisitions of journals.

(7). Helpful for those libraries who are not providing services like conferencing, facsimile, abstracting and indexing information through tele-text, document delivery.

(8). Bringing an awareness of the project among the libraries.

(9). Eliciting Librarians views on various details of INFLIBNET

(10). To review the present scenario of IT services in University Libraries of Uttar Pradesh and to identify the possible areas of cooperation for resource sharing and to minimize duplication.

(11). To foster, promote and sustain, by all appropriate means, the organization, availability and use of information.

(12). To take steps for mobilizing and upgrading the existing University Libraries services, taking advantage of the latest advances in IT.

(1.4). OBJECTIVES OF THE STUDY: -

The libraries and information centres play a vital role in providing library and information services. Here IT assists professionals and provide value-added qualitative information services. If IT is adopted, the libraries in academic environment can also provide qualitative, value-added information services to its users at par with other R&D information centres and can have access to the internationally available information resources. Though IT has potential for modernizing the library activities, there is a wide gap between what is told and what has been achieved. In the academic environment, it is only at the University level that the initiation has been made towards implementation of IT and the situation still is very pathetic. INFLIBNET since its establishment has been trying to improve information technology related acts at the university level. The objective of this study is to identify the problems faced by the library professionals in implementing IT and suggest the methods of improving the IT environment with INFLIBNET help and to evaluate the impact of this programme on IT oriented services in U.P. Universities. The main objectives of this study are: -

(1). To introduce and provide new services, revitalizing the existing services by providing faster access to the resources, by overcoming the space and time barriers.

(2). To encourage networking and resource sharing at University level.

(3). To provide information retrieval services either online or offline.

(4). To implement computerized operations and electronic services in the University Libraries for fast communication of information.

(5). To analyze the benefits of different type of information technology oriented services with respect to utility and demand.

(6). To develop a model for a network of University Libraries of Uttar Pradesh.

(7). To understand the problems faced by the University Libraries in providing information technology oriented services and to suggest their solutions.

(8). To identify the problems encountered during the implement of INFLIBNET programme in Universities.

(9). To reveal the future planning and strategy.

(10). Making the right information available to the right user at the time, in the right form at right cost, in the right place, to take the right action is the aim.

(11). To increase multi use of machine-readable records.

(12). To provide better service, on wider scale by adopting online storage and retrieval techniques.

(13). To increase sharing of resources.

(14). To help to increase the quality and range of services.

(15). To prepare staff to face the challenges of IT.

(1.5). SCPOE AND LIMITATIONS OF THE STUDY: -

The proposed study will cover the concept of different types of information technology oriented services. The scope of the study entitled **"Impact of INFLIBNET programme on Information technology oriented services in Uttar Pradesh State Universities: An Evaluative study"** is limited to the University Libraries of Uttar Pradesh. There are 20 Universities in U.P. of which 04 Universities are Central Universities, 01 Central institute, 02 Deemed Universities, 02 Agricultural Universities and 11 State level Universities.

The study is limited to the State, Deemed and Agricultural Universities only. Central Universities and Institutes are not included in this study because it is difficult to manage such a vast sample and as it is said from "quality and quantity one is maintained". So from the total of 20 Universities the present study covers 15 Universities, which are as follows:

(1). A.A.I Deemed University, Naini, Allahabad.

(2). Bundelkhand University, Jhansi.

(3). Chaudhary Charan Singh University, Meerut.

(4). Chhatrapti Sahuji Maharaj University, Kanpur.

(5). Chandra shekhar Azad University of Agriculture and Technology, Kanpur.

(6). Dayalbagh Educational Institute, Agra.

(7). Deen Dayal Upadhyay University, Gorakhpur.

(8). Dr. Bhim Rao Ambedkar University, Agra.

(9). Dr. Ram Manohar Lohia Avadh University, Faizabad.

(10). Mahatma Gandhi Kashi Vidyapeeth, Varanasi.

(11). MJP Rohilkhand University, Bareilly.

(12). Narendra Deva University of Agriculture and Technology, Faizabad.

(13). Sampurnanand Sanskrit Vishwa Vidhalaya, Varanasi.

(14). University of Lucknow, Lucknow.

(15). V.B.S Purvanchal University, Jaunpur.

From this the much emphasis is laid upon the Universities, which come under the purview INFLIBNET programme. The present study also not includes Open Universities.

(1.6). HYPOTHESES: -

The following hypotheses are formulated for the purpose of this study: -

(1). The University Libraries as compared to others are far behind in providing technological and qualitative services to the users.

(2). The facilities available at present are quite inadequate.

(3). Majority of the libraries requires infrastructural facilities for IT implementation.

(4). The IT implementation in the academic libraries is at infancy.

(5). INFLIBNET programme is an oasis in the dwindling future of libraries and is a boom to University Libraries.

(6). Development of regional network is the only economical and feasible solution to cater to the information needs of different categories of users.

(7). INFLIBNET is moving towards sorting out the financial resources of the University Libraries.

(8). The involvement of INFLIBNET in framing the manpower is a major break through.

(9). INFLIBNET library software SOUL is tailor made for University Libraries and is capable of meeting all the in-house activities of them.

(10). The grant provided by INFLIBNET for library automation is utilised in for the purpose it has been sanctioned.

(11). INFLIBNET programme is having a telling effect on the IT oriented services in the University Libraries.

(12). INFLIBNET has been working as a national network particularly for University Libraries and their users in a true sense.

(13). The INFLBNET through its various regional, national meetings with librarians, vice-chancellors, teachers etc has created some awareness with respect to library resources, sharing and networking.

(14). Large numbers of libraries are computerizing their various library services, using the guidelines suggested by the INFLIBNET.

(15). INFLIBNET is for academic excellence, saving resources and equity.

(16). This project is designed to promote creation of conducive environment for library resource sharing.

(17). The University Libraries, that are major partners in the development of union databases have a substantial role to play, to keep these databases growing both qualitatively and quantitatively.

(18). The participation and coordination of University Libraries is very essential for the successful implementation of this program.

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CHAPTER-2

REVIEW OF RELATED LITERATURE

Chapter 2

Review of Related Literature

It is very essential to review the literature regarding the topic of the study. The purpose of this review is not only to provide the background type of valuable information but also preventing the duplication in research. The exhaustive review of literature helps the researcher to know the existing condition (means what was done) and what is to be done in the future. The survey of related literature is a crucial aspect of planning of study and time spent on such a survey invariably is a wise investment as it provides a base for further research on the already existing knowledge in the field. Keeping in view the importance of related studies the investigator has to review the related literature having bearing on his work. In the present study, although it was not possible on the part of the investigator to get access to the entire published or unpublished resources due to lack of time, still an attempt has been made to study the literature concerned with the investigation in hand so as to provide philosophical background to the study.

In this chapter an attempt is being made to survey the sources related with the topic. The Hypothesis of the present study has been formulated on the backdrop of these studies. The survey is presented in chronological order. In **(1995) Davis, B**[1] traces *"Change and challenges:*

The impact of network technology on library services". The author reviews the likely future impact of the library networks in general and the Internet in particular, on Computerized Academic Library services. Similarly in **(1996) Pinder, C[2]** surveyed about the *"Customers and Academic Library services: an overview".* Discusses the application of the customer service to Academic Libraries in view of the long-standing problem of Libraries of knowing exactly how to term the people they serve. Considers the relationship between the customers and the Library in terms of environmental factors; finance; quality issues and pedagogic change.

In **(1997) Coleman, V[3]** etc discussed *"Towards a TQM paradigm: using SERVQUAL to measure Library service quality".* The SERVQUAL service quality measurement instrument was used to provide feedback from users on their minimum, perceived and desired levels of service from an Academic Library SERVQUAL is designed to measure service quality in 5 dimensions: tangibles; reliability; responsiveness; assurance; and empathy. Results revealed a discrepancy between the quality of the services provided by the Library and those desired by its customers.

In **(1997) Cholin, V.S. and Prakash.K[4]** discuss the *"Status of computerisation and Networking of University Libraries in India".* The paper discusses the need for Library Automation and the status of

financial support by INFLIBNET to the Academic Libraries for modernisation and computerisation of housekeeping activities. Also describes the efforts of INFLIBNET in formulating guidelines and formats for the Library automation work including data capturing, software for database creation, and training of personnel.

Cholin, Veeranna.S. (1997)[5] describes *"Resource Sharing among Indian University Libraries through INFLIBNET"*. Explains the need, concept and objectives of resource sharing. Discusses rationalization of financial resources based on the statistical analysis of data from 64 Universities held in the Union Database of serial holdings of the INFLIBNET. Suggests cooperative acquisition among libraries so that optimal utilisation of resources could be achieved.

Pramod Kumar and Kumbar, T.S (1998)[6] traces out *"INFLIBNET activities: Status plans and strategies for the future"*. They concluded that the co-operation from participating Libraries and support from the funding agencies is essential in achieving the objectives and in implementing its programmes successfully. Similarly **V.Chaya Devi (1998)**[7] surveyed about the *"Computerized information services in University Libraries of A.P a comparative study"*. **M.M Ansari (1998)**[8] discussed about the *"Automation of University Libraries of Bihar: problems and possible solutions"*. He concluded that the remedy of the problems related with IT implementation lies with the UGC. Similarly **Vatnal, R.M**

(1998)[9] studied about *"Information technology applications at Karnataka University Library: An experience".* **Bjornshauge, L (1998)**[10] presents *"Reengineering Academic Library services: the crucial steps towards the digital library".* He says that electronic journals purchase agreements and consortia offer Academic Libraries opportunities to render cheaper services that with print journals. Consortia agreements are a way of giving Libraries extended access and lower costs but require initial investment in licenses and technology.

In **(1999) Selvi, G.T**[11] traces out *"Internet Web search engines and (their) impact on Academic Library services".* The paper discusses the impact of Internet use on Academic Library services and presents an overview of important web resources for Academic Library users and staff. The Internet has enabled Academic Libraries to widen their services for beyond a basic reference service and traditional print- based collections. Similarly **Pradeep, C, Ganesan, P and Rama Reddy, E (1999)**[12] have analyzed *"Managing change in the Academic Libraries in the context of IT".* **Hasan, S.K (1999)**[13] evaluated *"Development of Universities information system at INFLIBNET".*

Harless, D.W and Allen, F.R (1999)[14] discusses *"Using the contingent valuation method to measure patron benefits of reference desk service in an Academic Library".* Describe a survey technique known as

the contingent valuation (cv) method to estimate value that Library users attach to reference desk service in the Academic Library.

Bjoernshauge, L. (1999)[15] describes, *"Consortia building and electronic licensing as vehicles for re-engineering Academic Library services: the case of the Technical Knowledge Center and Library of Denmark (DTV)".* The Technical Knowledge Centre and Library of Denmark (DTV) has broken the vicious circle of zero growth funding, prices increases, and periodical cancellations. It required concentrated efforts in consortia building, electronic licensing, phasing out paper editions, staff reductions as well as investments in staff education and development of integrated electronic services. Now the users at the Technical University of Denmark have easier access too much more content for the same funding. The development has given rise to new forms of cooperation with publishers and other Libraries in region. Outlines the reengineering plan and highlights effects on services and staff. The DTV approach to reengineering has attracted considerable international attention.

Pramod Kumar, T.S (2000)[16] describes about *"Networked Information service and Resource sharing: the INFLIBNET approach".* Discusses the overview of the approach that the INFLIBNET has taken to promote resource sharing and provide the information services among the

Libraries in the networked environment. It also presents the issues involved in this process and suggests a consortia approach to have an access to large pool of information resources. **Lydia, D.Mercy and Jaya.M (2000)**[17] prepared *"A plan for resource sharing through network among Universities and College Libraries in Tamil Nadu"*. **Nithyandan, K (2000)**[18] described about the *"Application of IT in Academic Libraries"*. **Chopra, Y.L and Mukherjee, Bhaskar (2000)**[19] discussed about the *"Use of IT in Library services at RD University, Jabalpur: user's reaction"*.

Kumar, T.S, Cholin, V.S and K.Prakash (2000)[20] discussed the *"Development of Union databases at INFLIBNET and role of University Libraries"*. This paper briefly describes the efforts that has gone in to developing these databases and discusses in detail the hardware, and software used. Various steps involved in processing, authenticating, duplicate checking and merging of the bibliographic records received from Universities have also been presented. Further it lists various problems and issues involved in collecting and organizing the data with focus on quality. The possible solutions to overcome from the current problems and major initiative taken by INFLIBNET in this direction. Similarly **Raju, P.Soma (2000)** [21] discusses *"INFLIBNET: problems and prospects"*. He discusses the problems in implementation and suggestions are given. Similarly **Pathak, Nityananda (2000)**[22] discusses the *"Role of INFLIBNET in Resource sharing"*. In this paper an analytical discussion is made about

the objectives and activities of Library Resource sharing in India. Enumerates the steps for planning a Resource sharing with online systems. Examines the impact of modern Information Technology on Resource sharing. It also examines the implications of INFLIBNET on Resource sharing. Concludes that the Library Networks can make effective use of computer resources in the country and the INFLIBNET plays a dominant role in this system.

Harley, B, Dreger.M and Knobloch, P (2000)[23] presented the paper *"The postmodern condition: Students, the Web, and Academic Library services"*. The postmodern condition is characterized by consumerism, superficiality, and knowledge fragmentation. Within this framework, Academic Librarians can devote more attention to facilitating student critical thinking than to training students in the use of Library resources to find information. Their primary goal is to enhance Librarian and student interaction.

Saha, Anant Lal (2002)[24] in his thesis *"Information and library network (INFLIBNET): A case study of University Libraries and Information centres in Gujarat"*. Throw light on the INFLIBNET implementation in Gujarat:

Mathur, Shishir (2002)[25] discusses in his thesis *"Role of INFLIBNET in Library Network"*. He concluded the Indian University Libraries are still trading in traditional materials and INFLIBNET is a solution for the problem of University Libraries".

Selvi, G.T (2002)[26] discusses *"Total quality management (TQM) and ISO 9000 in the context of Academic Library services".* Argues that value added information services can only conform to the requirements of user and user satisfaction, achieved only by the implementation of TQM principles in the Library and information services. To achieve and implement TQM for the system, Library professionals need to learn and understand core concepts of TQM and ISO 9000. Discusses necessary steps for Academic Libraries.

Shill, Harold B and Tonner, Shawn (2002)[27] describes, *"Creating a better place physical improvements in Academic Libraries"*. Based on findings from a survey of 354 Academic Libraries. This article describes the types of projects undertaken and the kinds of improvements provided.

Friedlander, Amy (2003)[28] presented, *"The Internet and Harry Potter: What User's want"*. The study sought to characterize the information environment in higher education, primarily for Library directors.

Concludes that the challenge for Librarians will be to recognize the needs of their immediate contexts and to combine a mix of resources in appropriate formats. **Vijay Kumar, J.K and Vijay Kumar, Manju (2003)**[29] presents the *"Knowledge connections, and Communities: a special reference to Indian University Libraries"*. They discusses that most of the Indian University Libraries are accessible not only to the Academic and Research communities but also to the General public. In this paper, an attempt is made to describe the effect of ICT developments on Indian University Libraries, how much they have been able to catch up with more developed institutions and what the future agenda for connecting knowledge and communities will be. This paper gives an idea about ICT applications in Indian Universities Libraries, and the role of INFLIBNET and future programme.

Huang, Ruhua and Wu, Jainzhong (2003)[30] discusses, *"The Academic Library development in China"*. Concludes that the past 20 years have seen a steady growth in Chinese Academic Libraries, at a pace that coincided with the overall development of the society. In future, Academic Libraries in China will surely play a more important role in assisting the educational modernization and globalization of the country. **Lapidus, Mariana (2003)**[31] describes *"Library service of pharmacy and health science students: results of a survey"*. Report the results of a questionnaire survey, conducted at the Massachusetts College of

Pharmacy and Health sciences (MCPHS), designed to engage the Librarians and students in a dialogue, which would consider the role of Academic Library and identify the problems in meeting the study and research needs of Library user's. Similarly **Walter, Scott (2003)**[32] traces out *"Education Information on the World Wide Web: opportunities for collection management in the electronic environment".* This essay describes a collection of web-based information resources in the field of education and provides an overview of the issues related to the acquisition, management, and promotion of these resources to the academic community.

Hartland-Fox, R and Thebridge, S (2003)[33] discusses *"Electronic information services evaluation: current activity and issues in U.K Academic Libraries".* E Valued is a HEFCE funded project in the U.K which is developing an online toolkit for evaluating Electronic Information Services (EIS) and to increase awareness of existing material to help Library managers in higher education to evaluate such services efficiently and effectively. An initial survey of Library managers and subsequent interview informed the current picture of EIS evaluation and identified the main challenges.

Manjunatha, K and Shivalingaiah, D (2003)[34] presents the *"Electronic resource sharing in Academic Libraries".* Discusses an attempt

to identify the needs and factors influencing electronic resource sharing and the requirements/strategies needed for effective resource sharing in Academic Libraries. Focuses on the planning that is needed for the successful implementation of electronic sharing and the need to gain the full support of the organizations senior management in this matter. Similarly **Bao, Xue-ming (2003)**[35] presents *"A study of Web-based interactive reference services via Academic Library home page".* Addresses the strategic issue of access and policy in developing World Wide Web based interactive reference services in the USA through a national survey.

Jones, Joseph (2003)[36] traces out *"A working Academic Libraries perspective on information technology literacy".* **Kartz, C (2003)**[37] discusses *"Transforming the delivery of service".* Two service models, joint-use Libraries and Information centers, offer Academic Libraries unique attractive services delivery options to help them rethink the Library as a place for different types of learning and collaboration. Describe these 2 models with examples of institutions where they have been implemented successfully. **Marcum, J.W (2003)**[38] discusses *"Visions: the Academic Library in 2012".* Discusses three major themes: technological developments, Library function and Librarian's roles. It reveals that technology serves as the driving force determining change in Academic Libraries.

Frank, K and Howell, E (2003)[39] discusses *"New relationships in Academe: opportunities for vitality and relevance".* Advocates the use of the proactive consulting model and explores the nature of the relationships with old as well as new partners and looks at some of the implications of the new relationship. Similarly **Wise, A (2003)**[40] describes *"Are digital library resources useful for learners and researchers?"* Evidence suggests that many students and staff members are having great difficulty finding and accessing the wealth of high quality published materials available online, and that digital library resources are not yet well integrated with the research and learning systems that are increasingly used. Librarians and publishers will need to work together, and both will need closer working relationships in future with lecturers and researchers.

Murthy, T.A.V and Cholin, V.S (2003)[41] presented paper on *"Library automation"* and discussed about its various aspects and role of INFLIBNET. Similarly **Chandraih. I (2003)**[42] traced out *"University Library Automation scenario-A study".* **Dabas, K.C, Sewa Singh, Gill, Nasib. S and Dabas, Sheela (2003)**[43] evaluated *"Automation scenario in University Libraries".* They concluded that Libraries are at infancy in matter of IT. **Anwar, Saleem; Bhatt, R.K; Sharma, U.C and Vashisth, R.N (2003)**[44] discussed about the *"Role of INFLIBNET in the growth and development of University Libraries in the changing Scenario".* They concluded that the INFLIBNET is a major national effort to improve information access.

Cholin, V.S; Prakash, Kand Murthy, T. A. V (2003)[45] discussed *"Sharing Resources in the Electronic Information Environment: Role of INFLIBNET".* They are also of the same view. Similarly **Prem Chand, Chandrakar, Rajesh and Gohel, Umesh discusses (2003)**[46] *"Retrospective Conversion tool for Academic Libraries in India: An Initiative by INFLIBNET".* This paper reveals about the tool developed recently by the INFLIBNET centre for retrospective conversion process at local level.

Yogendra Singh (2003) [47] presented paper entitled *"Library Automation in Academic Libraries in India: problems and prospects".* Traces briefly the history of Library automation in India. Tries to analyze the various factors that directly or indirectly affect the progress of Library automation. Also discusses the areas in which automation has taken place and why. Role of INFLIBNET has been discussed. Concludes that things are changing for the better as Library automation in Academic Libraries is now being regarded as an urgent need. **Ambuja, R (2003)**[48] presents the paper *"Planning a consortia among the campus Libraries of University of Madras".* This paper discusses the planning of Library consortia among the major campus Libraries of University of Madras. It identifies the need, prerequisites, problems and solutions involved in consortia formation.

Ibohal Singh, Khomdom Singh and Singh, R.K Joteen (2003)[49] in their paper entitled *"User's attitude towards UGC-INFLIBNET services at Manipur University Library: An assessment"*. Highlights the major objectives and services of INFLIBNET, assesses the attitude of the users towards the services of Manipur University Library under INFLIBNET programme through conducting a survey. Mention about the adopted methodology. Facilities and major achievement of Manipur University Library are highlighted. Findings are summarized in a suggestive way to use in providing services in future to meet the needs of the users. **Sinha, Manoj Kumar (2004)** [50] in *"Scenario of Automation and Networking of Library and Information Centers (LICS) of North Eastern Region of India: An evaluative study"*. This paper describes the present scenario of Library automation and networking of University/Institutional Library and Information Centres of the region. The survey findings mainly cover various aspects of Library automation and networking.

It became clear after the review of literature that the comprehensive study relating to the impact of INFLIBNET on Information Technology oriented services in State Universities of U.P. in general or particular is not available. For getting background information, literature available in primary, secondary and tertiary sources of information have been consulted.

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CHAPTER-3

METHODOLOGY

CHAPTER 3

Methodology

Research is a systematic investigation or process of reaching to a conclusion of a problem. As we know research is an organized venture and requires systematic planning. The first step of this planning is to choose a research methodology. Methods of research are known as research methodology. Methodology means the path chosen for reaching the target of result, conclusion or generalization. To perform research work in a systematic way, it is very necessary to have research methodology. It is helpful in achieving objectives.

So for the present research, descriptive method is used. It is a method of research or investigation, which is based on survey. It is a principal method of research in social sciences. That's why this method is selected which is also befitting for the present study. This method helped the researcher in the collection of facts by conducting surveys. This method also helped to know the what, why and how of the present situation.

(3.1). Data Collection: -

In the present study, using the survey method of research will collect maximum information and necessary data. The survey will be conducted by using the following tools: -

(i). Questionnaire.

(ii). Interview.

(iii). Observation.

(iv). Analysis of library records.

(v). Literature search.

(i). Questionnaire: -

Questionnaires are important tools of research commonly used in survey method. They refer to an act of standardized questions arranged in a definite order to which response are sought from all the individual constituting the sample with a view to obtaining comparable results.

For the present study a logical and comprehensive questionnaire was drafted with a covering letter stating the objectives of the questionnaire and assuring the respondents that their answers will be kept confidential. A mixed type (close and open type) of questionnaire is used which is pinpointed to the subject and objectives of the study. The questionnaire is also clear, easy and scientific in nature.

The questionnaire's pilot survey (pre-testing) was also conducted with a view to determine the suitability. After the pre-test the early draft is

carefully examined and the final questionnaire is prepared. The questionnaire was sent to 15 Universities, Deemed to be Universities and Agricultural University Libraries of U.P. The following figure shows the category wise break up of respondents: -

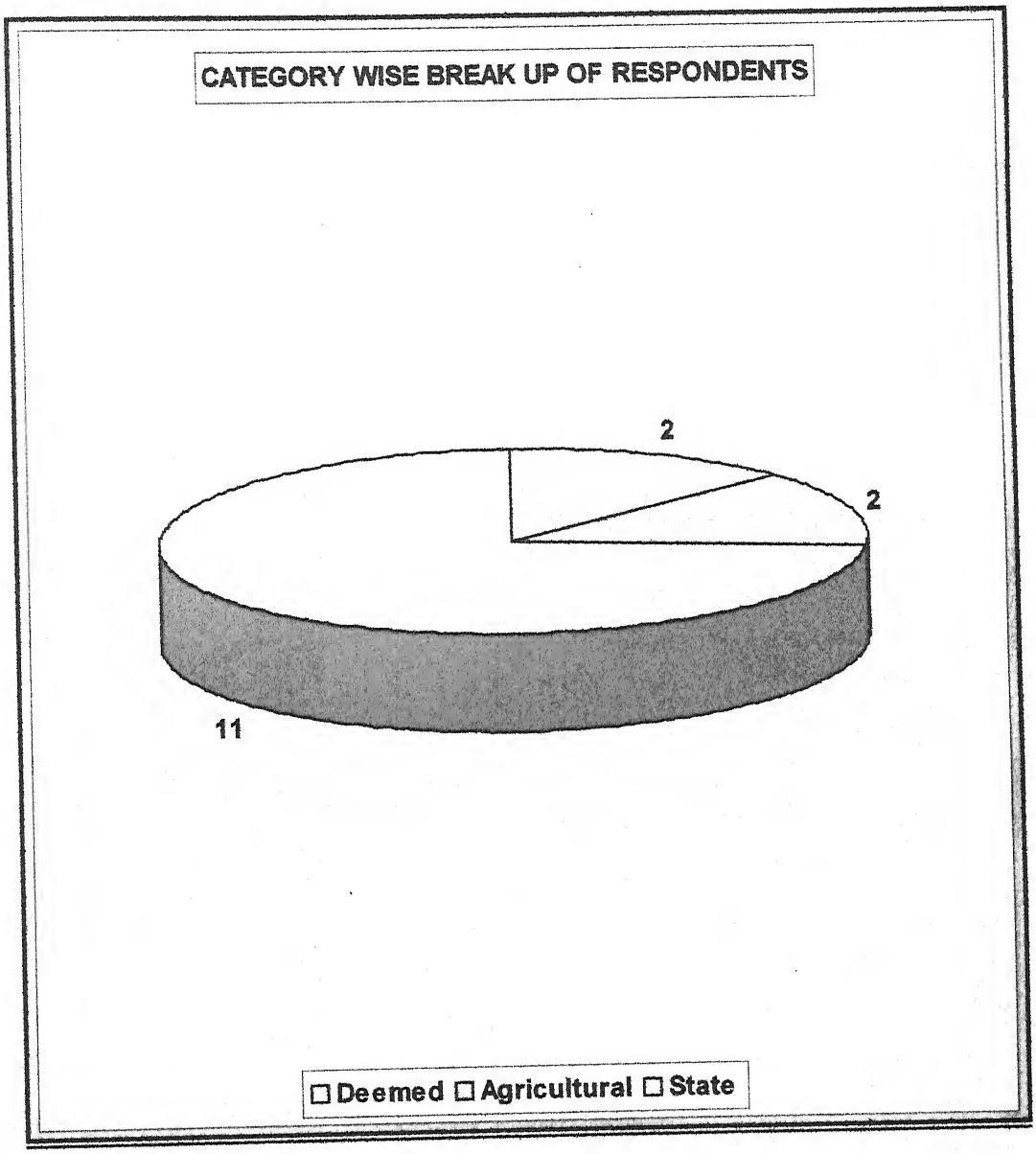

Fig.3.1

The above figure presents that out of 15 University Libraries of U.P taken for research purpose 11 are State Universities, 02 Deemed Universities and 02 Agricultural Universities.

The following figure shows the linking wise break up of respondents: -

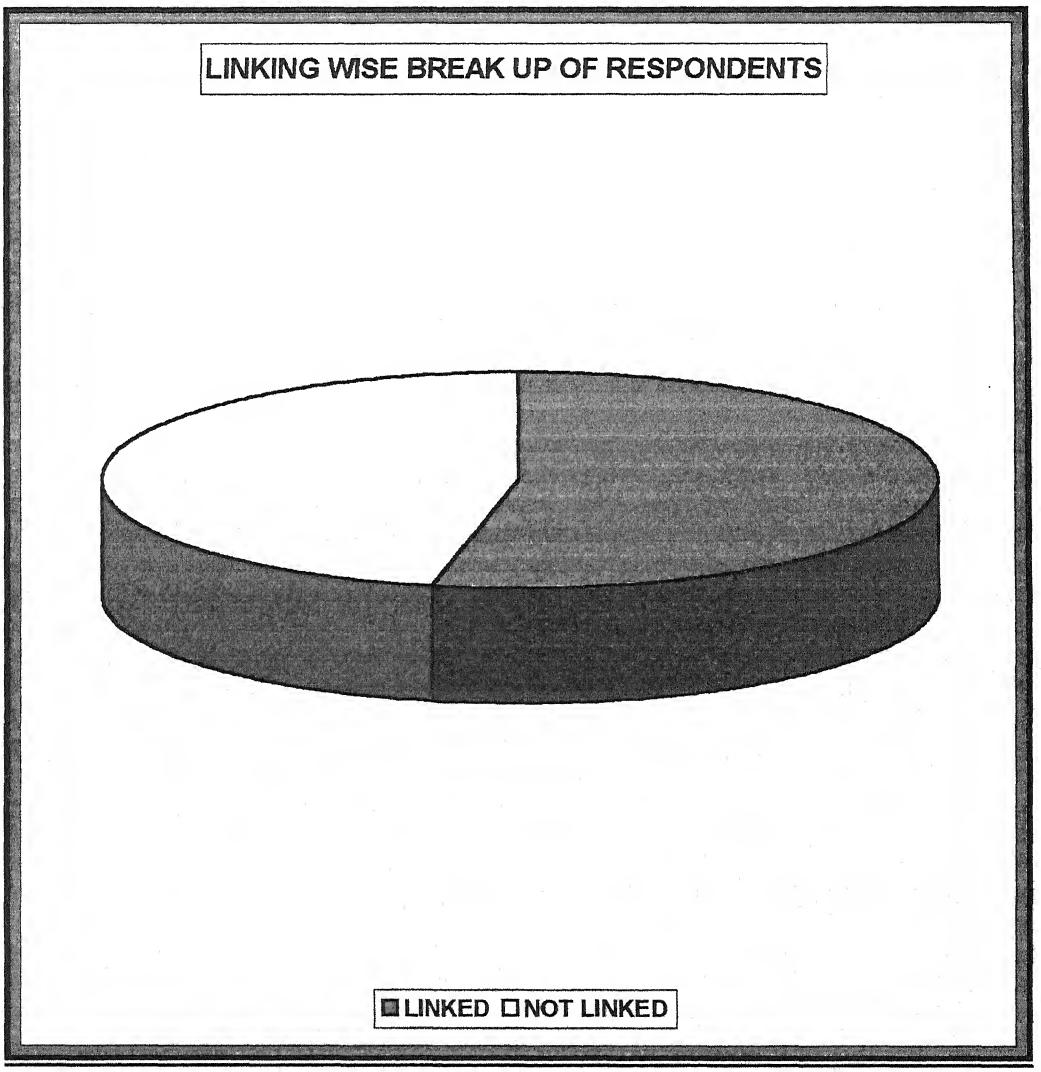

Fig.3.2

The above figure shows that out of 15 Universities selected for the purpose of study only 08 University Libraries of U.P. are linked with INFLIBNET.

(ii). Interview, Observation and Analysis of library records: -

The face-to-face conversation between the researcher and the respondent is called interview. It gives to the researcher an opportunity to explain and clarify questions. Observations supplement interviews and study of records. It is also suited for recording behaviour. It involves the investigator watching the subject, or research situation or phenomena and records information about characteristics of the phenomena.

Analysis of library records is also done. Personal visit was paid to INFLIBNET centre, Ahmedabad and different Universities and Deemed to be University participating under this programme to collect the data required as per the questionnaire to present the actual picture of the programmes impact on IT oriented services in University Libraries of U.P. The researcher was in regular touch with INFLIBNET Officials, Librarians and other senior professionals of the Universities.

Apart from these data primary and secondary sources are also scanned to collect data. Literature relating to the topic of research was

studied at two stages by searching through "Library and Information abstracts" on CD-ROM and "Library Literature" in physical form. First at the time of formulating the problem and second time after the formulation of problem to review the existing literature an exhaustive survey was done. A bibliography of the literature studied is given in the end. These constitute both printed and electronic viz:

(1). Library and information science abstract.

(2). Thesis and Dissertation abstract.

(3). Universities Hand book.

(4). Report of the inter-agency working group.

(5). INFLIBNET sites: -

http://www. Inflibnet. ac .in

http://www. ugc.Infonet. ernet. in.

(6). Sites of respective universities: -

(i). www. kanpuruniversity.org (CSJMU, Kanpur).

(ii). www. bundelkhand univ. org (Bundelkhand university, Jhansi).

(iii). www.csauk.ac. in (CSA, Kanpur).

(iv). www. lko univ.ac.in (Lucknow university)

(v). www. alld univ. edu (Allahabad university)

(vi). www. aaiu dec. org

(3.2). Organisation of data: -

Data collected from primary and secondary sources assume a bulk of heterogeneous information, which must be categorized or grouped into different like groups or classes. The act of grouping of related data into different classes is referred to as classification of data.

A large mass of figures needs organization. The first step in organizing a group of data is editing which adjusts the omissions, inconsistencies, irrelevant answers and wrong computations in the returns from a survey. Classification is the next step. It arranges the data according to some common characteristics possessed by the items constituting the data. Tabulation is the last step in organization. It arranges the data columns and rows.

Classification of data is useful in research due to following reasons: -

- To condense and simplify the collected data.
- To facilitate comparison.
- To make logical arrangement.
- To reveal the basis of tabulation.
- To bring out points of similarities and dissimilarities.
- To bring out the relationships.
- To prepare the data for tabulation.

Similarly tabulation of data is helpful in following ways: -

- ❖ It simplifies complex data
- ❖ It facilitates comparison
- ❖ It gives an identity to data
- ❖ It helps to classify the object of investigation
- ❖ It helps to detect error and omissions in the data
- ❖ To depict trend and tendencies of the problem under consideration
- ❖ To clarify the characteristics of data.

All the methods are used for organisations of data in the present study. It helped in comparison of data.

(3.3). <u>Presentation of data: -</u>

After the data have been organized as discussed above, they are ready for presentation in a proper form. Data may be presented either in diagrams or graphs. They are attractive and provide an overall picture leaving an impact on the mind. These also facilitate comparison. These are helpful in presenting facts to a layman. Types of diagrams include bar

diagrams; pie diagrams, pictographs; cartograms. Types of graphs include time series graphs; histograms; frequency polygon; ogive or cumulative frequency curves. They are extremely useful because they give a bird eyes view of the entire data and therefore the information presented is easily understood. They are extremely useful because of the following reasons: -

(1). They are attractive to the eye.

(2). Helpful in comparison.

(3). Saves the time and Labour.

The above-mentioned methods are used in the study as per the requirements for presentation of data.

(3.4). <u>Analysis of data: -</u>

Methods used in analyzing the presented data are numerous. Once reliable data has been collected, then we can: -

(a). Classify (categorize) data.

(b). Condense and summarize data.

(c). Correlate data.

(d). Identify the elements constituting a composite force.

Measure of central tendency (arithmetic mean, median, mode, geometric mean, harmonic mean), measures of variation and measures of skew ness and kurtosis are used to condense and summarize data. Condensation results in conversion of mass of data into a few significant figures. Correlation analysis (Scatter diagram method, Karl Pearson Coefficient correlation, Spearman's Rank correlation coefficient, concurrent deviation method, method of least square etc.) is used to correlate data. In order to identify elements of a composite force, the data is analyzed over a period of time, so as to isolate recurrences and trends cycles, seasonality, irregularities and long-term tendencies. For this purpose, time series analysis can be employed.

Basic steps in analysis of data are:

- Categorizing data.
- Coding data.
- Calculating the appropriate statistics (such as descriptive statistics and inferential statistics)

Categorizing of data involves actual assigning of data to different categories. Coding means converting the new data or responses to numerical codes, whereby they can be tabulated. Once data is ready to be

analyzed then one can use descriptive statistics or inferential statistics or both.

Descriptive statistics: -

It can be used to perform the following functions: -

(1). Pictorial representation (graphs, charts and tables).

(2). Measures of central tendency, including mean, median and mode.

(3). Measures of dispersion including mean deviation, standard deviation and the variance.

(4). Measure of relationship between or among the different variables in the data.

(5). Differences between two or more groups of individuals.

Inferential Statistics: -

It is commonly used for the following functions: -

(a). To predict or estimate population parameters or characteristics from random sample statistics.

(b). To test hypothesis-using test of statistical significance to determine if observed differences between groups or real or merely due to chance.

Here null hypothesis is used as opposed to the research hypothesis.

All or some of the above methods are used as per the conditions or requirements.

(3.5). Interpretation of the findings: -

Interpretation of the findings obtained through analysis is the last step. But it is an area of least agreement. Interpretation consists of drawing conclusions from the data collected and analyzed. It is a difficult job. An investigator must possess a high degree of skill and experience, to be able to do interpretation effectively.

In the interpretation of data, the following guidelines must be followed strictly: -

(1). Rules of logical thinking.

(2). Unbiased approach.

(3). Knowledge about the subject matter in the problem area and related areas.

(4). Clear and concise language.

If the data are not properly interpreted the whole object of the investigation may be frustrated and fallacious conclusions may be drawn. Statistics deals with quantitative data for the purpose of interpretation, quantitative data would need to be complemented by historical data, knowledge gained from non-quantitative sources etc. This is how researcher will be able to discover significant relationships underlying data of concern.

(3.6). Bibliographical References: -

Indian standard no. IS: 2381-1978 given by Bureau of Indian Standards (formerly Indian Standards Institute) is followed for the bibliographical references given in this work. References are provided at the end of each chapter and an exhaustive bibliography is given at the end.

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CHAPTER-4

ORGANISATION OF DATA

Chapter 4

Organisation of Data

The present chapter deals with organization and analysis of data so that the real picture could be presented in order to suggest the necessary mechanism for the successful implementation of this programme and to help the Universities in removing the hurdles faced during the implementation of this programme.

The purpose of organization of collected data is to present the collected data in such a way that its significance for achieving the objectives of the researcher can be appreciated and comparison of masses of data become possible.

Organisation of data involves two related process, namely classification of data and tabulation of data. The process of arranging data in groups of classes according to resemblances and similarities is technically called classification. Hence classification is the grouping of related facts into classes.

After the data have been classified, the next step is to present them in the form of tables. A table is a systematic arrangement of statistical data in columns and rows. It is a medium of communication with great economy and effectiveness for which ordinary prose is inadequate. In addition to its function of simple presentation, the statistical table is also a useful tool of analysis.

(4). Classification and tabulation of data of questionnaire: -

In Uttar Pradesh there are 20 Universities or University like institutions. The present study covers 15 such Universities/Institutions for the purpose of research Central and Open Universities are not included in this study.

(4.1). General data regarding U.P. Universities: -

(4.1.1). Name and year of establishment of U.P. Universities and their Libraries: -

The following table shows the name and year of establishment of University and their libraries: -

S. No.	Name of the University	Year Of Est.	Name of it's Library	Year Of Est.
1	A.A.I.D.U, Allahabad	1910	Central Library	1910
2	B.K.U, Jhansi	1975	Central Library	1975
3	C.C.S.U, Meerut	1967	Raja Mahendra Pratap Library	1967
4	C.S.J.M.U, Kanpur.	1965	Sri Ganesh Shankar Vidyarthi, Central Library	1965
5	C.S.A.U.A, Kanpur	1975	Central Library	1975
6	D.E.I, Agra	1981	DEI, Central Library.	1981
7	D.D.U.U., Gorakhpur.	1957	Central Library	1957
8	Dr.B.R.A.U, Agra.	1927	Central Library	1927
9	Dr.R.M.L.A.U, Faizabad	1975	Saraswati Bhawan, Central Library	1975
10	M.G.K.V, Varanasi	1929	Central Library	1929
11	M.J.P.R.U, Bareilly.	1975	Central Library	1985
12	N.D.U.A.T, Faizabad	1975	Central Library	1975
13	S.S.V, Varanasi	1958	Saraswati Bhawan Library	1958
14	University of Lucknow, Lucknow	1921	Tagore Library	1921
15	V.B.S.P.U, Jaunpur	1987	Vivekanand Central Library	1999

Table 4.1

(4.1.2). Year of computerisation and number of computers: -

The following table shows the year of computerisation and no. of computers in different University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Year Of Computerisation	No. Of Computers In the Library
1	A.A.I.D.U, Allahabad	2004	4
2	B.K.U, Jhansi	2002	12
3	C.C.S.U, Meerut	Not Mentioned	8
4	C.S.J.M.U, Kanpur.	2002	7
5	C.S.A.U.A, Kanpur	2004	6
6	D.E.I, Agra	1999	8
7	D.D.U.U., Gorakhpur.	1997	8
8	Dr.B.R.A.U, Agra.	1999	18
9	Dr.R.M.L.A.U, Faizabad	2002	15
10	M.G.K.V, Varanasi	2002	4
11	M.J.P.R.U, Bareilly.	Not Mentioned	5
12	N.D.U.A.T, Faizabad	2003	4
13	S.S.V, Varanasi	2002	7
14	University of Lucknow, Lucknow	1997	25
15	V.B.S.P.U, Jaunpur	2001	32

Table 4.2

The above table shows that most of the libraries are computerized after 1997 and the numbers of computers in most of the libraries are less than 15 except four libraries.

(4.1.3). Purpose for which computers are used: -

The following table shows the purpose for which computers are being used in University Libraries of Uttar Pradesh: -

S. No.	Name of the University	House Keeping Job's	Reader's Services	Management Support Activities
1	A.A.I.D.U, Allahabad	No	No	Yes
2	B.K.U, Jhansi	No	Yes	No
3	C.C.S.U, Meerut	No	No	No
4	C.S.J.M.U, Kanpur.	Yes	Yes	Yes
5	C.S.A.U.A, Kanpur	Yes	Yes	Yes
6	D.E.I, Agra	Yes	Yes	Yes
7	D.D.U.U., Gorakhpur.	Yes	Yes	No
8	Dr.B.R.A.U, Agra.	Yes	Yes	Yes
9	Dr.R.M.L.A.U, Faizabad	Yes	Yes	No
10	M.G.K.V, Varanasi	Yes	No	No
11	M.J.P.R.U, Bareilly.	No	No	No
12	N.D.U.A.T, Faizabad	No	Yes	No
13	S.S.V, Varanasi	Yes	Yes	No
14	University of Lucknow, Lucknow	Yes	No	No
15	V.B.S.P.U, Jaunpur	Yes	No	No

Table 4.3

The above table reveals that out of 15 Libraries 10 are using computers for House keeping jobs, whereas out of 15 Libraries 09 are using for Reader's services and only 05 are using for Management support activities.

The following table shows the housekeeping job's for which computer is being used in different University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Acqui-sition	Catalo-guing	Circulation Control	Serial Control	Journal Indexing	Stock Verific-ation
1	A.A.I.D.U, Allahabad	No	No	No	No	No	No
2	B.K.U, Jhansi	No	No	No	No	No	No
3	C.C.S.U, Meerut	No	No	No	No	No	No
4	C.S.J.M.U, Kanpur.	No	Yes	Yes	Yes	No	Yes
5	C.S.A.U.A, Kanpur	Yes	Yes	Yes	No	No	Yes
6	D.E.I, Agra	No	No	No	No	No	No
7	D.D.U.U., Gorakhpur.	No	Yes	No	No	No	No
8	Dr.B.R.A.U, Agra.	No	Yes	Yes	No	No	No
9	Dr.R.M.L.A.U, Faizabad	No	No	No	No	No	No
10	M.G.K.V, Varanasi	No	No	No	No	No	No
11	M.J.P.R.U, Bareilly.	No	No	No	No	No	No
12	N.D.U.A.T, Faizabad	No	No	No	No	No	No
13	S.S.V, Varanasi	No	Yes	Yes	Yes	No	No
14	University of Lucknow, Lucknow	No	No	No	No	No	No
15	V.B.S.P.U, Jaunpur	Yes	No	No	Yes	No	No

Table 4.4

The above table shows that out of 15 University Libraries of U.P. only 02 are using computers for acquisition purpose, 05 for cataloguing purpose, 04 for circulation control, 03 for serial control, 02 for stock verification and none for Journal Indexing.

The following table shows the status of U.P. University Libraries regarding means of Information dissemination: -

S. No.	Name of the University	Telex	Fax	E-Mail	Internet Homepage
1	A.A.I.D.U, Allahabad	No	Yes	Yes	Yes
2	B.K.U, Jhansi	No	No	Yes	No
3	C.C.S.U, Meerut	No	No	No	No
4	C.S.J.M.U, Kanpur.	No	No	Yes	Yes
5	C.S.A.U.A, Kanpur	Yes	Yes	Yes	Yes
6	D.E.I, Agra	No	No	Yes	No
7	D.D.U.U., Gorakhpur.	No	No	Yes	No
8	Dr.B.R.A.U, Agra.	No	Yes	Yes	Yes
9	Dr.R.M.L.A.U, Faizabad	Yes	Yes	Yes	Yes
10	M.G.K.V, Varanasi	No	No	Yes	No
11	M.J.P.R.U, Bareilly.	No	No	No	No
12	N.D.U.A.T, Faizabad	No	No	Yes	No
13	S.S.V, Varanasi	No	No	No	No
14	University of Lucknow, Lucknow	No	Yes	Yes	No
15	V.B.S.P.U, Jaunpur	No	No	Yes	No

Table 4.5

The table reveals that out of 15 Universities only 02 have Telex, 05 have Fax, 12 have E-mail and only 05 have Internet home page.

The given below table depicts the status of U.P. University Libraries regarding use of computers for reader's services: -

S. No.	Name of the University	Union Catalogue Access	Bibliographic Services	Database Searches	SDI	CAS	Article Delivery
1	A.A.I.D.U, Allahabad	No	Yes	Yes	No	No	No
2	B.K.U, Jhansi	No	No	No	No	No	No
3	C.C.S.U, Meerut	No	No	No	No	No	No
4	C.S.J.M.U, Kanpur.	Yes	Yes	Yes	Yes	Yes	No
5	C.S.A.U.A, Kanpur	Yes	Yes	Yes	Yes	Yes	Yes
6	D.E.I, Agra	No	No	Yes	Yes	Yes	No
7	D.D.U.U., Gorakhpur.	No	No	No	No	No	No
8	Dr.B.R.A.U, Agra.	No	Yes	Yes	No	Yes	No
9	Dr.R.M.L.A.U, Faizabad	No	No	Yes	No	No	No
10	M.G.K.V, Varanasi	No	No	No	No	No	No
11	M.J.P.R.U, Bareilly.	No	No	No	No	No	No
12	N.D.U.A.T, Faizabad	No	Yes	Yes	No	No	No
13	S.S.V, Varanasi	No	Yes	Yes	Yes	Yes	No
14	University of Lucknow, Lucknow	No	No	No	No	No	No
15	V.B.S.P.U, Jaunpur	No	No	No	No	No	No

Table 4.6

The table shows the data that out of 15 University Libraries of U.P., 05 use computers for providing CAS service, 04 for SDI service, 08 for Database searches, 06 for Bibliographic services, 02 for Union catalogue access and 01 for Article delivery

(4.2). Data regarding INFLIBNET: -

(4.2.1). Linking with INFLIBNET: -

The following table shows the status of connectivity of U.P Universities to INFLIBNET programme: -

S. No.	Name of the University	Status
1	A.A.I.D.U, Allahabad	Not Linked
2	B.K.U, Jhansi	Linked
3	C.C.S.U, Meerut	Linked
4	C.S.J.M.U, Kanpur.	Linked
5	C.S.A.U.A, Kanpur	Not Linked
6	D.E.I, Agra	Not Linked
7	D.D.U.U., Gorakhpur.	Linked
8	Dr.B.R.A.U, Agra.	Linked
9	Dr.R.M.L.A.U, Faizabad	Not Linked
10	M.G.K.V, Varanasi	Linked
11	M.J.P.R.U, Bareilly.	Not Linked
12	N.D.U.A.T, Faizabad	Not Linked
13	S.S.V, Varanasi	Linked
14	University of Lucknow, Lucknow	Linked
15	V.B.S.P.U, Jaunpur	Not Linked

Table 4.7

The above table shows that out of 15 Universities of U.P. taken for research purpose 08 Universities are linked with INFLIBNET whereas 07 Universities are not yet linked with INFLIBNET. Among the Universities those are not linked 02 are Deemed Universities, 02 Agricultural Universities and 03 are State Universities.

(4.2.2). Year of linking with INFLIBNET: -

The given below table shows the year of linking of different Universities to INFLIBNET programme: -

S. No.	Name of the University	Year of Linking With INFLIBNET
1	B.K.U, Jhansi	2002
2	C.C.S.U, Meerut	2001
3	C.S.J.M.U, Kanpur.	2002
4	D.D.U.U., Gorakhpur.	1996
5	Dr.B.R.A.U, Agra.	1998
6	M.G.K.V, Varanasi	2000
7	S.S.V, Varanasi	2002
8	University of Lucknow, Lucknow	2002

Table 4.8

The above table clearly depicts that most of the Universities are linked with INFLIBNET only after 1996 although the INFLIBNET programme was started in 1991.

(4.2.3). Software: -

The following table presents the list of Universities using different software for the purpose of automation of their libraries. For creation of databases of library holdings and automation of in-house operations, integrated library management software is required, keeping in view the initiative taken by INFLIBNET to develop the software, libraries were

advised in the beginning to use CDS/ISIS software for creation of databases. Later on INFLIBNET developed SOUL software.

The given below table present the status of software used in different University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Software Used
1	B.K.U, Jhansi	SOUL
2	C.C.S.U, Meerut	SOUL
3	C.S.J.M.U, Kanpur.	SOUL
4	D.D.U.U., Gorakhpur.	CDS/ISIS
5	Dr.B.R.A.U, Agra.	SOUL
6	M.G.K.V, Varanasi	SOUL
7	S.S.V, Varanasi	SOUL
8	University of Lucknow, Lucknow	SOUL

Table 4.9

It is evident from the above table that out of 08 University Libraries of U.P. those are linked with INFLIBNET 07 are using SOUL software, 01 is using CDS/ISIS software.

(4.2.4). Information Scientist: -

The following table shows the status of U.P. University Libraries regarding the post of "Information Scientist" of INFLIBNET: -

S. No.	Name of the University	Whether Filled Information Scientist Post
1	B.K.U, Jhansi	Vacant
2	C.C.S.U, Meerut	Vacant
3	C.S.J.M.U, Kanpur.	Advertised
4	D.D.U.U., Gorakhpur.	Filled
5	Dr.B.R.A.U, Agra.	Filled
6	M.G.K.V, Varanasi	Vacant
7	S.S.V, Varanasi	Vacant
8	University of Lucknow, Lucknow	Vacant

Table 4.10

The above table shows that out of 08 Universities those are linked with INFLIBNET, only 02 have filled the post of Information Scientist whereas this post is lying vacant in 05 Universities and 01 University have recently advertised this post.

(4.2.5). Total data added in INFLIBNET database: -

The given below table shows the status regarding total data added to INFLIBNET database by the University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Total Data Added to INFLIBNET Database
1	B.K.U, Jhansi	20,000
2	C.C.S.U, Meerut	30,000
3	C.S.J.M.U, Kanpur.	40,000
4	D.D.U.U., Gorakhpur.	6,000
5	Dr.B.R.A.U, Agra.	1,43,500
6	M.G.K.V, Varanasi	Yet to Start
7	S.S.V, Varanasi	10,000
8	University of Lucknow, Lucknow	Yet to Start

Table 4.11

The above table shows that the data addition work is yet in very preliminary stage in most of the University Libraries, out of 08 University Libraries, 02 University Libraries have not yet started the work.

(4.2.6). Data entry work done by: -

The following table shows that the Data entry work is done by which category in U.P. University Libraries: -

S. No.	Name of the University	Data Entry Work Done
1	B.K.U, Jhansi	On per entry basis
2	C.C.S.U, Meerut	On Contract
3	C.S.J.M.U, Kanpur.	On per entry basis
4	D.D.U.U., Gorakhpur.	By Staff
5	Dr.B.R.A.U, Agra.	By Staff
6	M.G.K.V, Varanasi	On per entry basis
7	S.S.V, Varanasi	On Contract
8	University of Lucknow, Lucknow	On Contract

Table 4.12

The above table reveals that out of 08 Libraries, 03 are doing data entry work on contract basis, 03 on per entry basis and 02 by their own staff. This means that 75% of the Libraries have given their database building work to private parties on either entry or contract basis.

(4.2.7). Technical support: -

The given below table shows the status of U.P. University Libraries regarding technical support given by INFLIBNET: -

S. No.	Name of the University	Technical Support Received
1	B.K.U, Jhansi	Yes
2	C.C.S.U, Meerut	No
3	C.S.J.M.U, Kanpur.	No
4	D.D.U.U., Gorakhpur.	Yes
5	Dr.B.R.A.U, Agra.	Yes
6	M.G.K.V, Varanasi	Yes
7	S.S.V, Varanasi	No
8	University of Lucknow, Lucknow	No

Table 4.13

The table shows that out of 08 University Libraries, 04 means 50% have received technical support from INFLIBNET other 50% are still waiting for this support.

(4.2.8). Standards: -

INFLIBNET has evolved guidelines for data capturing based on common communication format, which has been provided to all participating Universities. They have also been suggested to follow AACR-2 and LCSH for database creation. This is an essential step to be followed by all Universities to maintain uniformity and quality in the database, the response received to this effect has been tabulated below: -

S. No.	Name of the University	Action regarding Standards
1	B.K.U, Jhansi	Followed
2	C.C.S.U, Meerut	Not Followed
3	C.S.J.M.U, Kanpur.	Followed
4	D.D.U.U., Gorakhpur.	Followed
5	Dr.B.R.A.U, Agra.	Followed
6	M.G.K.V, Varanasi	Followed
7	S.S.V, Varanasi	Not Followed
8	University of Lucknow, Lucknow	Followed

Table 4.14

From the above table it is clear that out of 08 University Libraries, 06 are following the standards whereas 02 are not following the standards recommended by INFLIBNET.

(4.2.9). Grants: -

(4.2.9.1). Recurring Grants: -

As it is mentioned earlier that INFLIBNET gives Universities a recurring grant to meet the expenditures involved in automation and networking activity. The grant is divided into five categories viz. salary of Information Scientist, Database creation, Telephone charges (network usage) Consumable and Computer maintenance.

The status of this support given to U.P. University Libraries is given below:

S. No.	Name of the University	Status Regarding Recurring Grant
1	B.K.U, Jhansi	Not Received
2	C.C.S.U, Meerut	Not Received
3	C.S.J.M.U, Kanpur.	Not Received
4	D.D.U.U., Gorakhpur.	Received
5	Dr.B.R.A.U, Agra.	Received
6	M.G.K.V, Varanasi	Not Received
7	S.S.V, Varanasi	Not Received
8	University of Lucknow, Lucknow	Not Received

Table 4.15

The above table shows that out of 08 Universities only 02 have received the Recurring Grant till date, other has not received the same. Universities have been requested to send the utilization certificate so as to get the Recurring Grants. UGC may look into the matter and Recurring Grants may be released as soon as the utilisation certificate is sent. Many universities have not send the utilisation certificate yet that's why not received the grants yet.

(4.2.9.2). Status regarding Non-Recurring Grants: -

The given below table shows the status of U.P. Universities regarding Non-Recurring Grant of INFLIBNET: -

S. No.	Name of the University	Status Regarding Non Recurring Grant
1	B.K.U, Jhansi	Funded
2	C.C.S.U, Meerut	Funded
3	C.S.J.M.U, Kanpur.	Funded
4	D.D.U.U., Gorakhpur.	Funded
5	Dr.B.R.A.U, Agra.	Funded
6	M.G.K.V, Varanasi	Funded
7	S.S.V, Varanasi	Funded
8	University of Lucknow, Lucknow	Funded

Table 4.16

The above table depicts that 08 University Libraries of U.P. have been provided with Non-Recurring Grants of Rs. 6.5 Lakh for infrastructure requirement.

(4.2.10). UGC consortium: -

UGC-INFONET E-Journals consortium is a new initiative taken by the UGC to facilitate free access to scholarly Journals and databases in all areas of learning to the research and academic community across the country. The programme is wholly funded by UGC and is being executed by INFLIBNET centre an Inter University centre of UGC located at Ahmedabad. The following table shows the participation of U.P. University Libraries in UGC Consortium: -

S. No.	Name of the University	Whether Participating In UGC Consortium
1	B.K.U, Jhansi	Yes
2	C.C.S.U, Meerut	No
3	C.S.J.M.U, Kanpur.	No
4	D.D.U.U., Gorakhpur.	Yes
5	Dr.B.R.A.U, Agra.	Yes
6	Dr.R.M.L.A.U, Faizabad	Yes
7	M.G.K.V, Varanasi	No
8	M.J.P.R.U, Bareilly	No
9	S.S.V, Varanasi	No
10	University of Lucknow, Lucknow	Yes
11	V.B.S.P.U, Jaunpur	No

Table 4.17

The above table shows that out of 11 University Libraries, 05 are participating in UGC consortium whereas 06 are not participating in it.

(4.2.11). INFONET: -

The following table shows the status regarding the participation of U.P. Universities Libraries in INFONET: -

S. No.	Name of the University	Whether Participating In INFONET
1	B.K.U, Jhansi	Yes
2	C.C.S.U, Meerut	No
3	C.S.J.M.U, Kanpur.	No
4	D.D.U.U., Gorakhpur.	Yes
5	Dr.B.R.A.U, Agra.	Yes
6	Dr.R.M.L.A.U, Faizabad	Yes
7	M.G.K.V, Varanasi	Yes
8	M.J.P.R.U, Bareilly	No
9	S.S.V, Varanasi	No
10	University of Lucknow, Lucknow	Yes
11	V.B.S.P.U, Jaunpur	Yes

Table 4.18(a)

The table reveals that out of 11 University Libraries, 07 are participating in INFONET programme whereas 04 are not participating in it.

The following table shows the status of connectivity of INFONET in the University Libraries of Uttar Pradesh: -

S.No.	Name of the University	Connectivity	Status
1	B.K.U, Jhansi	BB VSAT 256 kbps**	Commissioned on 05/01/2004
2	C.C.S.U, Meerut	LL 256 kbps**	Commissioned on 31/03/2004
3	C.S.J.M.U, Kanpur.	LL 256 kbps**	Commissioned on 18/11/2003
4	D.E.I., Agra.	BB VSAT 256 kbps**	Commissioned on 03/09/2004
5	D.D.U.U., Gorakhpur.	RL 256 kbps**	Sanctioned by UGC/PO awaite
6	Dr.B.R.A.U, Agra.	LL 512 kbps**	Link Procurement Started
7	Dr.R.M.L.A.U, Faizabad	BB VSAT 256 kbps**	Commissioned on 10/09/2003
8	M.G.K.V, Varanasi	LL 256 kbps**	Commissioned on 04/12/2004
9	M.J.P.R.U, Bareilly	BB VSAT 256 kbps**	Commissioned on 10/12/2004
10	S.S.V, Varanasi	LL 256 kbps**	Installation In Progress
11	University of Lucknow, Lucknow	LL 2 Mbps	Commissioned on 04/06/2004
12	V.B.S.P.U, Jaunpur	BB VSAT 256 kbps**	Sanctioned by UGC/PO awaite

Table 4.18(b)

(4.2.12). SEWAK (E-mail service of INFLIBNET): -

The following table shows the status of U.P. University Libraries regarding SEWAK: -

S. No.	Name of the University	Whether Using SEWAK of INFLIBNET
1	B.K.U, Jhansi	No
2	C.C.S.U, Meerut	No
3	C.S.J.M.U, Kanpur.	No
4	D.D.U.U., Gorakhpur.	Yes
5	Dr.B.R.A.U, Agra.	Yes
6	M.G.K.V, Varanasi	No
7	S.S.V, Varanasi	No
8	University of Lucknow, Lucknow	No

Table 4.19

The table shows that only 02 out of 08 Universities are using SEWAK (E-mail service of INFLIBNET) while other 06 are not using it.

(4.3). Services/Facilities: -

(4.3.1). CD-ROM search service: -

The following table depicts that whether the Libraries provide CD-ROM search service or not: -

S. No.	Name of the University	Whether Providing CD-ROM Search Facility
1	A.A.I.D.U, Allahabad	Yes
2	B.K.U, Jhansi	Yes
3	C.C.S.U, Meerut	Yes
4	C.S.J.M.U, Kanpur.	No
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	Yes
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	No
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.20

The above table reveals that majority of the University Libraries i.e. 09 out of 15 are not providing CD-ROM search service to its users. Only 06 Universities are providing this service.

(4.3.2). Online search service: -

The given below table shows the status of U.P. University Libraries regarding online search facility: -

S. No.	Name of the University	Whether Providing Online Search Facility
1	A.A.I.D.U, Allahabad	Yes
2	B.K.U, Jhansi	Yes
3	C.C.S.U, Meerut	Yes
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	No
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	No
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.21

The above table shows the data regarding number of University Libraries providing "Online search service" out of 15 universities only 06 are providing this service whereas 09 are not providing this service.

(4.3.3). OPAC: -

The following table provides status of U.P. University Libraries regarding OPAC: -

S. No.	Name of the University	Status Regarding OPAC
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	No
3	C.C.S.U, Meerut	No
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	No
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	No
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	Yes
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.22

The given table shows the drastic condition of U.P. University Libraries regarding "OPAC" out of 15 only 04 have online public access catalogue whereas 11 do not have this facility.

(4.3.4). Internet: -

The present table depicts the status of U.P. University Libraries regarding Internet facility: -

S. No.	Name of the University	Status Regarding Internet
1	A.A.I.D.U, Allahabad	Yes
2	B.K.U, Jhansi	Yes
3	C.C.S.U, Meerut	Yes
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	Yes
7	D.D.U.U., Gorakhpur.	Yes
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	Yes
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	Yes
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	Yes
15	V.B.S.P.U, Jaunpur	Yes

Table 4.23

The above table reveals that out of 15 University Libraries, 12 are providing Internet service to its user's whereas 03 are not providing this service.

(4.3.5). E-Journals: -

The given below table shows data relating to subscription of E-Journals: -

S. No.	Name of the University	Status Regarding Sub-scription Of E-journal
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	Yes
3	C.C.S.U, Meerut	No
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	Yes
7	D.D.U.U., Gorakhpur.	Yes
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	No
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.24

The above table clearly indicates that out of 15 University Libraries only 06 are subscribing E-Journals whereas 09 are not subscribing them.

(4.3.6). Inter-Library Networks: -

The following table reveals status of U.P. University Libraries regarding Inter-Library Networks: -

S. No.	Name of the University	Status Regarding Inter-Library Networks
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	No
3	C.C.S.U, Meerut	No
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	No
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	No
8	Dr.B.R.A.U, Agra.	No
9	Dr.R.M.L.A.U, Faizabad	Yes
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	Yes
15	V.B.S.P.U, Jaunpur	No

Table 4.25

The table clearly indicates that out of 15 University Libraries only 03 have Inter-Library Networks while remaining 12 does not have them.

(4.3.7). Impact: -

The following table shows the impact of IT on different aspects of Libraries: -

		Positive	Negative	No Effect	Total
(a).	**Library Professional's**				
(I)	Service's	15	-	-	15
(II)	Productivity	10	-	5	15
(b).	**Library Users**				
(I).	Meeting Demands	7	2	6	15
(II)	Library User Relationship	4	-	11	15
(c).	**Information Services**				
(I).	Quality	8	-	7	15
(II)	Quantum of Information	6	4	5	15
(d).	**Library as a whole**				
(I).	Usage of library material	5	4	6	15
(II)	Image	6	3	6	15
(III).	Socio Cultural	3	2	10	15

Table 4.26

The above table reveals that out of 15 Universities all consider impact of IT as positive on services; 10 says that its impact is positive on productivity and 05 says it has no effect. 07 consider IT has positive impact in meeting user's demands, 02 says that it has negative impact

and 06 says that it has no effect; 04 Librarians are of the view that IT has positive impact on Library user relationship whereas 11 is of the view that it has no effect. 08 Librarians is of the view that IT has enhanced the quality of Information services and 07 says it has no effect; 06 consider it as positive on quantum of Information, 04 says it has negative impact and 05 says it has no effect. 05 Librarians is of the view that it has positive impact on usage of Library material, 04consider it negative whereas 06 found no effect; 06 Librarians found that IT has enhanced the image of Library, 03 says it has negative effect and 06 says it has no effect; 03 Librarians is of the view that IT has positive impact on socio-cultural relations whereas 02 says it has negative impact and 10 says it has no effect on such relations.

The following table shows the impact of INFLIBNET on different IT oriented services of University Libraries of Uttar Pradesh. The table presents the view of University Librarians that for which service INFLIBNET assistance is required: -

Services Activities		Esse-ntial	Neces-sary	Desirable but not necessary	Not Necessary at all	Total
(a).	Online Search	3	2	2	1	8
(b).	E-Journals	4	2	1	1	8
(c).	Internet	4	2	1	1	8
(d).	Teleconferencing	1	2	3	2	8
(e).	CD-ROM search Service	3	2	2	1	8
(f).	Consortium (Resource Sharing)	6	2	-	-	8
(g).	Circulation	3	2	3	-	8
(h).	Cataloguing (OPAC)	5	2	1	-	8
(I).	Automatic indexes & Abstracts	2	2	2	2	8

Table 4.27

The table depicts that out of 08 Universities 03 consider impact of INFLIBNET essential on Online search, 02 necessary, 02 says desirable but not necessary and 01 as not necessary at all. 04 is of the view that INFLIBNET is essential for E-Journals, 02 says it is necessary, 01 as desirable not necessary and 01 as not necessary at all. 04 says that INFLIBNET is essential for Internet, 02 says it is necessary, 01 says it is desirable not necessary and 01 as not necessary at all. Only 01 is of the view that INFLIBNET is essential for Teleconferencing, 02 says it is necessary, 03 says it is desirable but not necessary and 02 not necessary at all. 03 Librarians found impact of INFLIBNET as essential on CD-ROM search service, 02 as necessary, 02 as desirable but not necessary and 01 not necessary at all. 06 Librarians consider INFLIBNET essential for

consortium and 02 as necessary. 03 Librarians consider it as essential for Circulation, 02 necessary and 03 desirable but not necessary. Similarly 05 consider it essential, 02 necessary, 01 desirable but not necessary. 02 say that it is essential for automatic Indexes/Abstracts, 02 consider it necessary, 02 desirable but not necessary and 02 as not necessary at all.

The given below table shows the performance of University Libraries of U.P regarding IT oriented services: -

Services		Poor	Fair	Good	Excellent	No such service	Total
(a).	Internet	-	3	3	6	3	15
(b).	E-Mail	-	1	2	6	6	15
(c).	CD-ROM Search	-	3	2	1	9	15
(d).	Online Search	-	1	2	3	9	15
(e).	E-Journals	-	1	2	3	9	15
(f).	E-Books	-	1	2	2	10	15
(g).	Database Search	-	-	2	3	10	15
(h).	Tele & Video Conferencing	-	1	1	-	13	15
(I).	OPAC	-	2	2	-	11	15
(j).	Automatic Indexes & Abstracts	-	1	1	-	13	15

Table 4.28

The above table shows the performance of Libraries in terms of different services. Out of 15 Libraries 03 consider their Internet service as fair, 03 as good and 06 as excellent whereas in 03 Libraries there is no

such service. Regarding E-mail service 01 consider it as fair, 02 as good, 06 as excellent whereas no such service in 06 Libraries. 03 Libraries consider their CD-ROM search service as fair, 02 as good, 01 as excellent whereas 09 Libraries does not provide this service. Similarly 01 library consider its online service as fair, 02 as good, 03 as excellent and 09 libraries do not have this service. Regarding E-Journals 01 rate performance as fair, 02 as good, 03 as excellent whereas 09 Libraries dose not provide any such service.

Similarly 01 Library rates its performance as fair regarding E-Books, 02 as good, 02 as excellent while 10 do not have any such service. Database search performance is rated good in 02 Libraries; excellent in 03 Libraries and 10 does not provide this service. 01 Library rate its performance as fair and 01 as good in providing Tele & Videoconferencing while 13 Libraries does not provide this facility. 02 Libraries consider performance of their OPAC as fair and 02 as excellent whereas 11 do not provide this service. 01 Library rated their Automatic Indexes/Abstracts as fair, 01 as good while 13 does not provide this service to its user's.

(4.4). <u>Staff: -</u>

(4.4.1). In charge: -

The following table shows the status regarding In charge of Library in the University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Incharge
1	A.A.I.D.U, Allahabad	Librarian
2	B.K.U, Jhansi	Deputy Librarian
3	C.C.S.U, Meerut	Deputy Librarian
4	C.S.J.M.U, Kanpur.	Librarian
5	C.S.A.U.A, Kanpur	Officer Incharge
6	D.E.I, Agra	Asstt.Librarian
7	D.D.U.U., Gorakhpur.	Librarian
8	Dr.B.R.A.U, Agra.	Honorary Librarian
9	Dr.R.M.L.A.U, Faizabad	Librarian
10	M.G.K.V, Varanasi	Asstt.Librarian
11	M.J.P.R.U, Bareilly.	Honorary Librarian
12	N.D.U.A.T, Faizabad	Asstt.Librarian
13	S.S.V, Varanasi	Librarian
14	University of Lucknow, Lucknow	Deputy Librarian
15	V.B.S.P.U, Jaunpur	Asstt.Librarian

Table 4.29

The table shows that out of 15 University Libraries only 05 have Librarians, 03 have Deputy Librarians, 02 have Honorary Librarians, 04 have Assistant Librarians and 01 have Officer-in-charge of the Library.

(4.4.2). Computer Training of in charge: -

The following table shows the status of U.P. Universities Librarian/In charge qualified in computers: -

S. No.	Name of the University	Whether Incharge is Trained in Computer's
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	No
3	C.C.S.U, Meerut	No
4	C.S.J.M.U, Kanpur.	Yes
5	C.S.A.U.A, Kanpur	No
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	No
8	Dr.B.R.A.U, Agra.	Yes
9	Dr.R.M.L.A.U, Faizabad	No
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.30

The table depicts that out of 15 University Librarians 13 are not qualified in computers whereas only 02 are trained in computers.

(4.4.3). Total staff: -

The given below table shows the data regarding total staff in different University Libraries of Uttar Pradesh: -

S. No.	Name of the University	Profess-ional	Semi Professional	Non Prof-essional	Total
1	A.A.I.D.U, Allahabad	3	-	5	8
2	B.K.U, Jhansi	16	1	3	20
3	C.C.S.U, Meerut	8	-	-	8
4	C.S.J.M.U, Kanpur.	4	7	4	15
5	C.S.A.U.A, Kanpur	12	5	1	18
6	D.E.I, Agra	6	2	3	11
7	D.D.U.U., Gorakhpur.	6	4	7	17
8	Dr.B.R.A.U, Agra.	10	8	20	38
9	Dr.R.M.L.A.U, Faizabad	7	2	7	16
10	M.G.K.V, Varanasi	4	2	3	9
11	M.J.P.R.U, Bareilly.	2	2	6	10
12	N.D.U.A.T, Faizabad	2	1	3	6
13	S.S.V, Varanasi	7	8	11	26
14	University of Lucknow, Lucknow	1	13	-	14
15	V.B.S.P.U, Jaunpur	5	2	7	14

Table 4.31

The table shows that most of the Universities have less than total staff of 20 members; only 02 Universities have more than 20 staff members.

(4.4.4). Training courses attended: -

The following table shows the status of U.P. University Libraries regarding number of training courses attended by Library staff in last five years: -

S. No.	Name of the University	Training Programme Attended By			Total
		Profess-ional	Semi Professional	Non Professional	
1	A.A.I.D.U, Allahabad	1	-	-	1
2	B.K.U, Jhansi	4	-	-	4
3	C.C.S.U, Meerut	1	-	-	1
4	C.S.J.M.U, Kanpur.	1	1	-	2
5	C.S.A.U.A, Kanpur	2	-	-	2
6	D.E.I, Agra	-	-	-	NIL
7	D.D.U.U., Gorakhpur.	2	-	-	2
8	Dr.B.R.A.U, Agra.	2	-	-	2
9	Dr.R.M.L.A.U, Faizabad	-	-	-	NIL
10	M.G.K.V, Varanasi	1	-	-	1
11	M.J.P.R.U, Bareilly.	-	-	-	NIL
12	N.D.U.A.T, Faizabad	1	-	-	1
13	S.S.V, Varanasi	3	-	-	3
14	University of Lucknow, Lucknow	-	-	-	NIL
15	V.B.S.P.U, Jaunpur	1	-	1	2

Table 4.32

The table reveals the pathetic condition of training of staff in University Libraries of U.P. All the University Libraries have less than 05 staff members who attended any training programme during last five years.

(4.4.5). Persons trained in computers: -

The given table shows the data regarding number of persons trained in computer application in different University Libraries of Uttar Pradesh: -

S. No.	Name of the University	No. Of Persons Trained In Computer Application
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	3
3	C.C.S.U, Meerut	7
4	C.S.J.M.U, Kanpur.	4
5	C.S.A.U.A, Kanpur	2
6	D.E.I, Agra	4
7	D.D.U.U., Gorakhpur.	3
8	Dr.B.R.A.U, Agra.	4
9	Dr.R.M.L.A.U, Faizabad	6
10	M.G.K.V, Varanasi	2
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	2
13	S.S.V, Varanasi	3
14	University of Lucknow, Lucknow	7
15	V.B.S.P.U, Jaunpur	4

Table 4.33

The table clearly depicts the numbers of persons trained in computer application in different University Libraries of U.P. Majority of the Universities have less than 05 trained persons except 03 Universities.

(4.4.6). Programmer: -

The following table shows the status of U.P. University Libraries regarding the post of Programmer: -

S. No.	Name of the University	Status Regarding the Post of Programmer
1	A.A.I.D.U, Allahabad	No
2	B.K.U, Jhansi	No
3	C.C.S.U, Meerut	No
4	C.S.J.M.U, Kanpur.	Recently Advertised
5	C.S.A.U.A, Kanpur	No
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	Yes
8	Dr.B.R.A.U, Agra.	No
9	Dr.R.M.L.A.U, Faizabad	Yes
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	No
14	University of Lucknow, Lucknow	No
15	V.B.S.P.U, Jaunpur	No

Table 4.34

The table reveals the condition of Libraries regarding the post of programmer. Out of 15 Universities only 02 Universities have the post of programmer while 01 University have recently advertised the post whereas 12 other Universities does not have this post.

(4.4.7). INFLIBNET training programme: -

Following table shows the status regarding the participation of staff in INFLIBNET training programme: -

S. No.	Name of the University	Status Regarding Staff Participation in INFLIBNET Training Programme
1	B.K.U, Jhansi	Participated
2	C.C.S.U, Meerut	Participated
3	C.S.J.M.U, Kanpur.	Not Participated
4	D.D.U.U., Gorakhpur.	Participated
5	Dr.B.R.A.U, Agra.	Participated
6	Dr.R.M.L.A.U, Faizabad	Participated
7	M.G.K.V, Varanasi	Not Participated
8	M.J.P.R.U, Bareilly.	Not Participated
9	S.S.V, Varanasi	Participated
10	University of Lucknow, Lucknow	Participated
11	V.B.S.P.U, Jaunpur	Participated

Table 4.35

This is an essential activity of INFLIBNET to train the participating Libraries staff, which has been done on priority basis. The table shows that out of 11 Universities, 07 University Libraries staff has participated in the INFLIBNET training programme whereas 04 University Libraries staff does not participated in it.

(4.4.8). <u>On site Training: -</u>

INFLIBNET also provides the On-site training to participating Universities staff. The following table shows the status of these Universities regarding On- site Training: -

On Site Training Provided	No Of Universities
Yes	3
No	5
No Response/Not Applicable	7
	Total = 15

<u>Table 4.36</u>

The above table clearly shows that much emphasis was not given to the On-site Training programme. Only 03 Universities claims to have On-site Training.

(4.4.9). Participation in CALIBER: -

The following table shows the participation of staff of U.P University Libraries in "CALIBER": -

S. No.	Name of the University	Whether Participating In CALIBER
1	A.A.I.D.U, Allahabad	Yes
2	B.K.U, Jhansi	Yes
3	C.C.S.U, Meerut	Yes
4	C.S.J.M.U, Kanpur.	No
5	C.S.A.U.A, Kanpur	Yes
6	D.E.I, Agra	No
7	D.D.U.U., Gorakhpur.	Yes
8	Dr.B.R.A.U, Agra.	No
9	Dr.R.M.L.A.U, Faizabad	Yes
10	M.G.K.V, Varanasi	No
11	M.J.P.R.U, Bareilly.	No
12	N.D.U.A.T, Faizabad	No
13	S.S.V, Varanasi	Yes
14	University of Lucknow, Lucknow	Yes
15	V.B.S.P.U, Jaunpur	No

Table 4.37

It is evident from the given table that out of 15 University Libraries of U.P., 08 Libraries staff has participated in CALIBER whereas 07 have not participated in it.

(4.5.). Funds: -

(4.5.1). Allocation of Funds for IT: -

The given below table shows the view of Librarians/In charge regarding allocation of Funds for IT: -

S. No.	Name of the University	Whether Funds for IT are Sufficient
1	A.A.I.D.U, Allahabad	Not Sufficient
2	B.K.U, Jhansi	Not Sufficient
3	C.C.S.U, Meerut	Not Sufficient
4	C.S.J.M.U, Kanpur.	Not Sufficient
5	C.S.A.U.A, Kanpur	Not Sufficient
6	D.E.I, Agra	Not Sufficient
7	D.D.U.U., Gorakhpur.	Not Sufficient
8	Dr.B.R.A.U, Agra.	Sufficient
9	Dr.R.M.L.A.U, Faizabad	Not Sufficient
10	M.G.K.V, Varanasi	Not Sufficient
11	M.J.P.R.U, Bareilly.	Not Sufficient
12	N.D.U.A.T, Faizabad	Not Sufficient
13	S.S.V, Varanasi	Not Sufficient
14	University of Lucknow, Lucknow	Not Sufficient
15	V.B.S.P.U, Jaunpur	Not Sufficient

Table 4.38

The table depicts that out of 15 Universities, only 01 University Library consider allocation of Funds sufficient for IT whereas 14 consider funds insufficient for IT.

(4.5.2). Budget of the Library: -

The following table shows Budget of the University Libraries of U.P during 2004-05: -

S. No.	Name of the University	Total Budget for the Year 2004-05(In Lakhs)
1	A.A.I.D.U, Allahabad	24
2	B.K.U, Jhansi	30
3	C.C.S.U, Meerut	45
4	C.S.J.M.U, Kanpur.	150
5	C.S.A.U.A, Kanpur	15
6	D.E.I, Agra	42
7	D.D.U.U., Gorakhpur.	6.5
8	Dr.B.R.A.U, Agra.	16
9	Dr.R.M.L.A.U, Faizabad	13
10	M.G.K.V, Varanasi	20
11	M.J.P.R.U, Bareilly.	40
12	N.D.U.A.T, Faizabad	15
13	S.S.V, Varanasi	5
14	University of Lucknow, Lucknow	22
15	V.B.S.P.U, Jaunpur	60

Table 4.39

The above table reveals that most of the University Libraries of U.P. have Budget less than 50 Lakh except 02 Universities.

(4.6.). Users: -

The following table shows the number of User's in different University Libraries of U.P. during the year 2004-05: -

S. No.	Name of the University	No Of Users During Year 2004-05
1	A.A.I.D.U, Allahabad	4755
2	B.K.U, Jhansi	9650
3	C.C.S.U, Meerut	1550
4	C.S.J.M.U, Kanpur.	7500
5	C.S.A.U.A, Kanpur	4355
6	D.E.I, Agra	3300
7	D.D.U.U., Gorakhpur.	6050
8	Dr.B.R.A.U, Agra.	5150
9	Dr.R.M.L.A.U, Faizabad	4000
10	M.G.K.V, Varanasi	5250
11	M.J.P.R.U, Bareilly.	2000
12	N.D.U.A.T, Faizabad	4010
13	S.S.V, Varanasi	3106
14	University of Lucknow, Lucknow	5150
15	V.B.S.P.U, Jaunpur	3086

Table 4.40

It is clearly evident from the given table that most of the University Libraries of U.P. have less than 5000 User's except 06 Libraries.

(4.6.1). Users awareness about INFLIBNET services: -

The following table shows the Users awareness about INFLIBNET services in the University Libraries of U.P: -

N=102

S. No.	Category of Users	Yes		No		Total	
		Male (%)	Female (%)	Male (%)	Female (%)	Yes (%)	No (%)
1	P.G Student	09 (22.50)	05 (12.50)	14 (35.00)	12 (30.00)	14 (35.00)	16 (65.0)
2	Research Scholar	10 (43.48)	09 (39.13)	01 (4.35)	03 (13.04)	19 (83.61)	04 (17.39)
3	Teachers	06 (33.33)	07 (38.39)	01 (5.56)	02 (22.22)	13 (72.22)	05 (27.78)
4	Non teaching-Staff	03 (14.29)	04 (19.05)	09 (42.86)	05 (23.80)	07 (33.34)	14 (66.66)

Source: Interview and Observation

Table 4.41

The above table shows that mostly Research scholars are aware about the INFLIBNET Services followed by Teachers, Post Graduate Students and Non-teaching staff.

References

(1). **Agarwal, S. P.** Library and Information Services in India: The Current Scenario, New Delhi, Concept Publishing Company, 1987.

(2). **Agrawal, S. P.** Development of Library Services in India, New Delhi: Concept, 1989.

(3). **Chand, Kuldeep.** Current Trends in Information Technology: Impact on Information Scene in India, New Delhi: Batra, 1993.

(4). **Chandra, Ramesh (ed.).** Technological Change in Libraries, Delhi: Kalpaz Publications, 2003.

(5). **http://www.inflibnet.ac.in**

(6). **Kaula, H. K.** Library and Information Networking NACLIN, 2002, DELNET, Delhi.

CHAPTER-5

Chapter 5

Analysis And Interpretation of Data

In the present age of information every one is talking about Information Technology (IT) and digital resources. Libraries and Information Centres have started using computers for its day-to-day activities and have also been adopting the state -of -the-art Information Technology for making the library and information services faster and effective. The computerisation of library operations facilitates the easy access to the information, saves the time of the professionals as well as users and avoids duplication of housekeeping operations. But the process of computerisation of library activities needs proper planning, selection of hardware/ software, awareness of use of IT among the professionals and users, trained manpower and willingness of the authorities for implementing the automation and networking of library activities.

(5.1). Important Findings: -

(5.1.1). Source of fund for Computerisation: -

For computerisation 53.3% Universities are funded from the INFLIBNET, which is followed by 33.3% Universities by parent body and 13.4% from ICAR which shows that INFLIBNET a major funding agencies for library automation and networking of University libraries of U.P.

(5.1.2). Information technology infrastructure: Hardware Facilities: -

Survey results indicate the availability of various Information Technology infrastructures in the University Libraries of U.P., which are given below: -

- Minicomputer is found only in 6.7% libraries;

- Personal and multimedia computers with CD-ROM drives are available in 93.3% whereas 80.0% libraries are having many computers of Server and Nodes configuration;

- 80.0% libraries are having facility of additional computer terminals to access In-House library databases through OPAC terminals;

- Storage capacity wise or speed of processor wise analysis shows that 73.3% libraries are having Pentium I-IV system whereas only 26.7% are having old machines like PC 386 and PC 486;

- ❖ Bar code Generators and scanners are available in only 40.0% libraries whereas the CD-NET facility is available only in 33.3% libraries;

- ❖ Gist card for data creation of language collection is available in 73.3% libraries;

- ❖ Printers are available in more than 60% libraries. Dot Matrix printer is available in maximum number of libraries (86.7%), which is followed by Laser Printer (73.3%) and Ink-Jet or Desk Jet Printer (60%) libraries.

(5.1.3). Information Technology Infrastructure: Audio-Visual Facility:

Audio-Visual Aids are important gadgets for teaching -learning. For accessing Non-Book material these gadgets are used. Out of 15 libraries:

- ❖ Television, VCP/VCR facility is available in 46.7% libraries;

- ❖ CD/VCD player and Over Head Projector are found in 53.3% libraries;

- ❖ Microfilm reader, Micro-Slide Projectors and Microfiche and Micro-cards are available in only 13.3% libraries; and

- ❖ Voice-Input Device and Film Projectors are available in 26.7% libraries.

(5.1.4). Information Technology Infrastructure: Software: -

- ❖ Operating system software and Office Management Software (MS-Office) and Library Application Software is available in 93.3% University Libraries; Networking software is available in 80.0% libraries whereas Programming Language Software is available in only 13.3% libraries.

(5.1.5). Information Communication and Reprographic/Photocopying Facilities: -

- ❖ Telephone and Photocopying facilities are available in all (100.0%) libraries whereas Reprography and Telex is available in only 33.3% and 13.3% University Libraries respectively, Fax, E-Mail, Internet is available in 80% University Libraries while Teleconferencing Device is available in 20.0% libraries only.

(5.1.6). Facility of Electronic/Digital Information Resources: -

Survey result highlights the Electronic/Digital Information Resources available in libraries under study, out of 15 University Libraries: -

- ❖ Only 33.3% libraries hosted their web sites for displaying information related to University;

- ❖ The facility of Audio-Visual collection is available in 80.0% libraries whereas access to In-house Databases through OPAC is available in 60.0% libraries; and

- ❖ Non-Book Materials (Electronic/Digital), access to CD-ROM Databases and On-Line International Indian databases is available in 73.3% libraries.

(5.1.7). Access of Services of INFLIBNET by the University Libraries of U.P: -

- ❖ INFLIBNET is providing various types of information services to the academic community of India, which can be accessed from the **http://www.inflibnet.ac.in.** The services offered by the INFLIBNET are Bibliographic Databases Services, CD-ROM Databases Access Services, On-Line Databases services and most popular Document

Delivery Services (DDS). These services are being also utilised by the academic community of U.P through Internet or other means.

- Survey results shows the access of INFLIBNET Services by the library users of U.P., which indicates that out of 15 libraries, the users of 40.0% are accessing all services being offered by the INFLIBNET centre the library users of 20.0% libraries each are accessing Document Delivery and Bibliographic Services respectively whereas the library users of 20.0% libraries are not accessing any services of INFLIBNET.

(5.1.8). Preference of using various Databases by the Library Users: -

- The library users of Universities under study have their own preferences for using the various databases available at their locations and at INFLIBNET;

- The survey finding clearly reveals that the library users of 20.0% libraries prefer to use all databases and services being offered by the INFLIBNET;

- ❖ Whereas the users of 13.3% libraries prefer to use CD-ROM Databases, In-House Databases and both CD-ROM and In-House Databases respectively and only 20.0% libraries have not responded.

(5.1.9). Library Network Facilities: -

- ❖ LAN within library is available only in 33.3% libraries whereas Campus LAN is available in 26.7% libraries. Networking of library computers have not started in 40.0% libraries.

(5.1.10). Connectivity: -

- ❖ It can be seen that, most of the Universities have been connected either through VSNL or NICNET or ERNET or local ISP's by using dial-up facility. But the Universities can't provide information services just by being connecting to one of these networks. Universities need to have leased connection or VSAT connection facility to extend the library services and access to literature on Internet to their users.

(5.1.11). Users Awareness About INFLIBNET Services: -

- ❖ Even though most of the users of different category know about computer, the number of users who are aware about INFLIBNET Services of the Library are found to be less (51.96%). Among the

different groups, Research Scholars and Teachers are found to be more aware about the services in comparison to others. Awareness about the same among the PG Students and Non-Teaching staff are below the desired rank.

The conclusions are presented with the help of following diagrams also: -

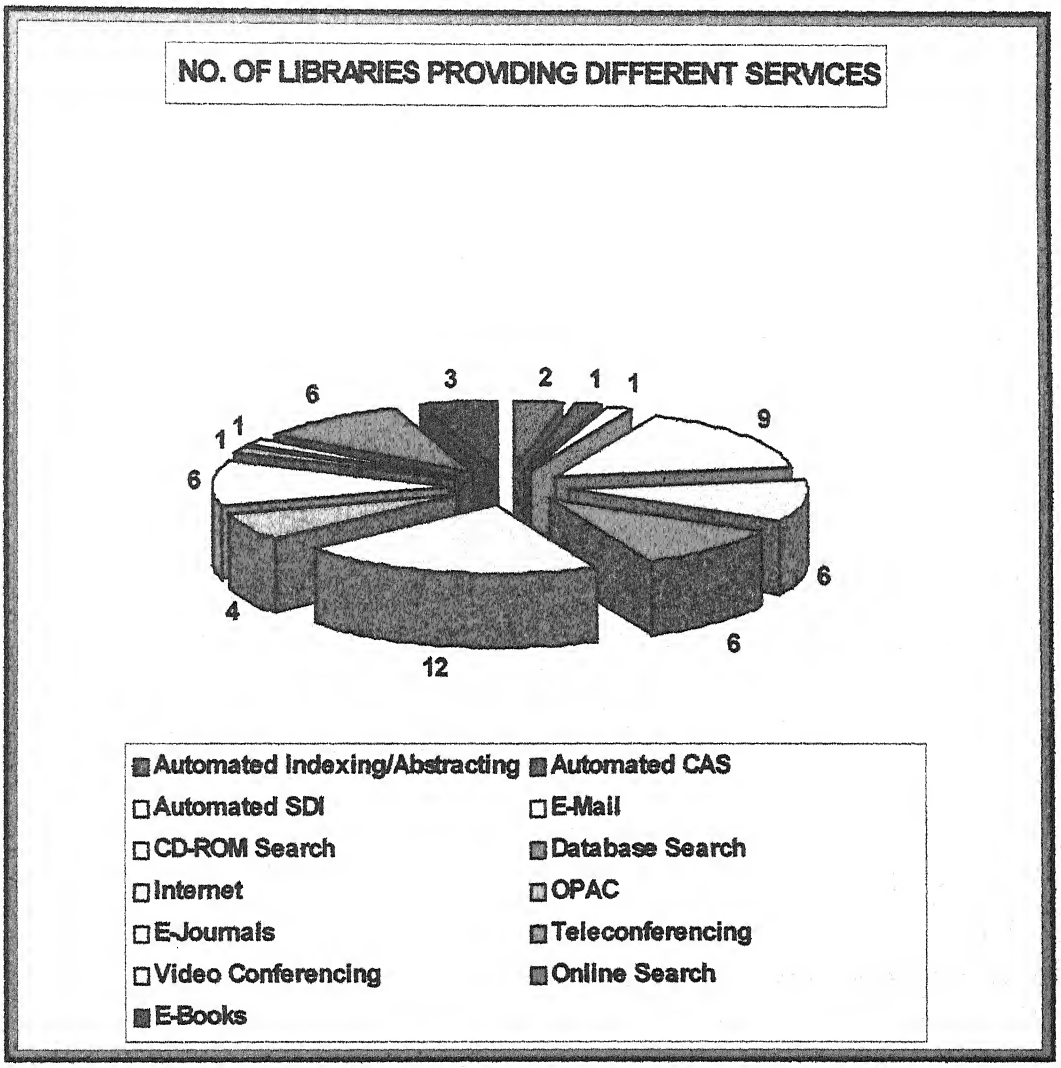

Fig. 5.1

The above figure reveals that out of 15 University Libraries of U. P. only 02 are providing Automated Indexing/Abstracting service, 01

Automated CAS, 01 Automated SDI, 09 E-mail, 06 CD-ROM Search, 06 Database Search, 12 Internet, 04 OPAC, 06 E-Journals, 01 Teleconferencing, 01 Video Conferencing, 06 Online Search and 03 E-Books.

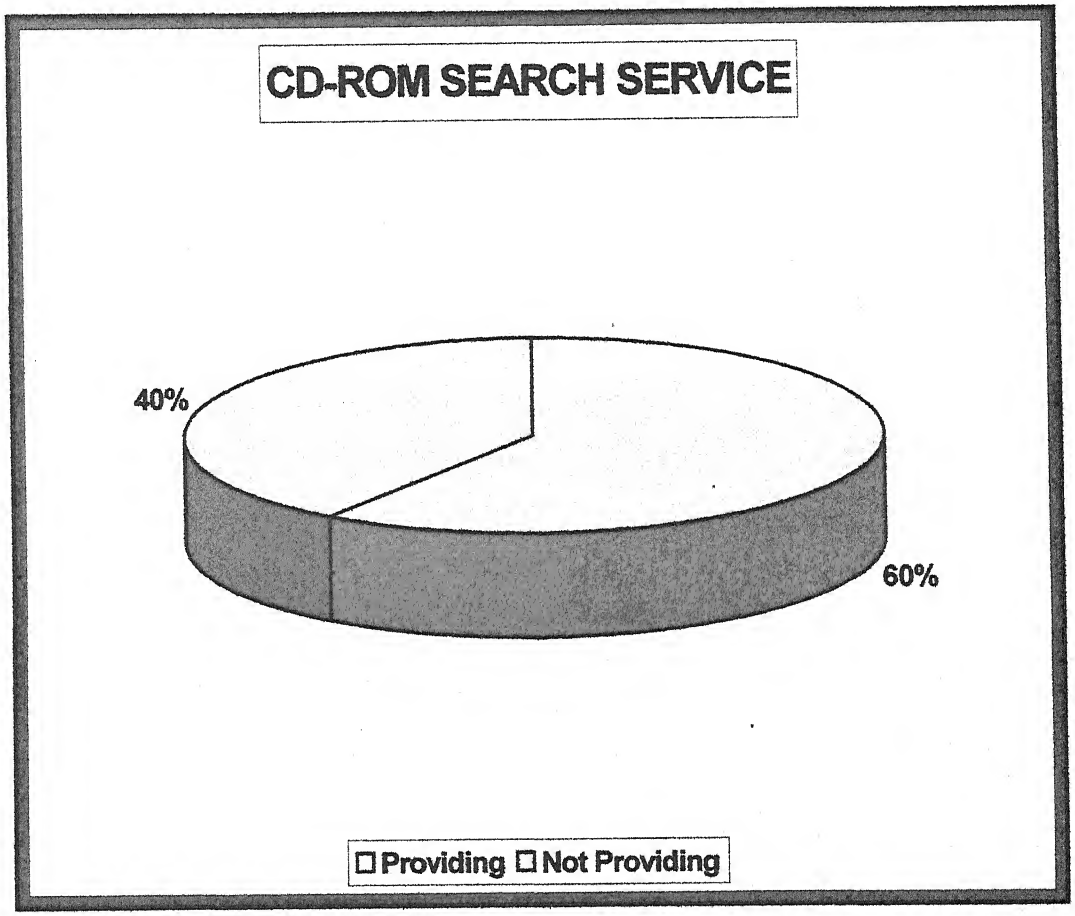

Fig.5.2

The above figure shows that out of 15 University Libraries of U.P., 40% (06) are providing CD-ROM search service whereas 60% (09) are not providing this service.

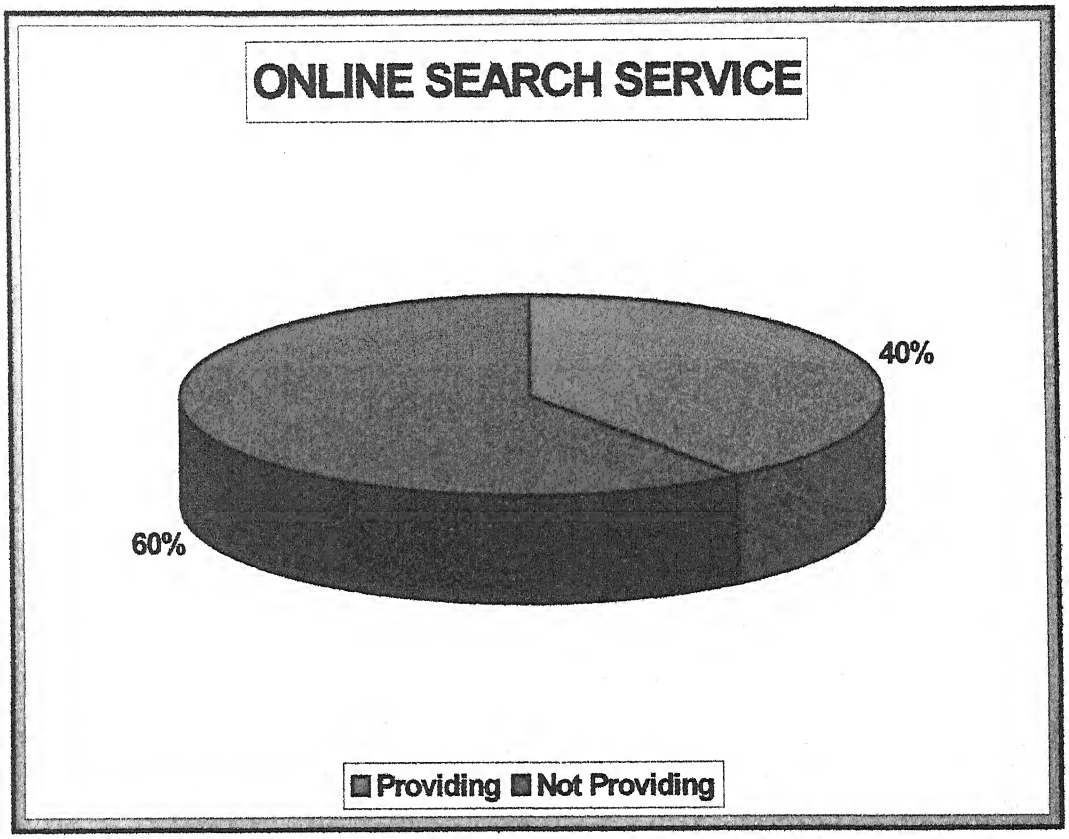

Fig 5.3

The above figure depicts that out of 15 University Libraries of U.P. 40% (06) are providing online search service whereas 60% (09) are not providing this service.

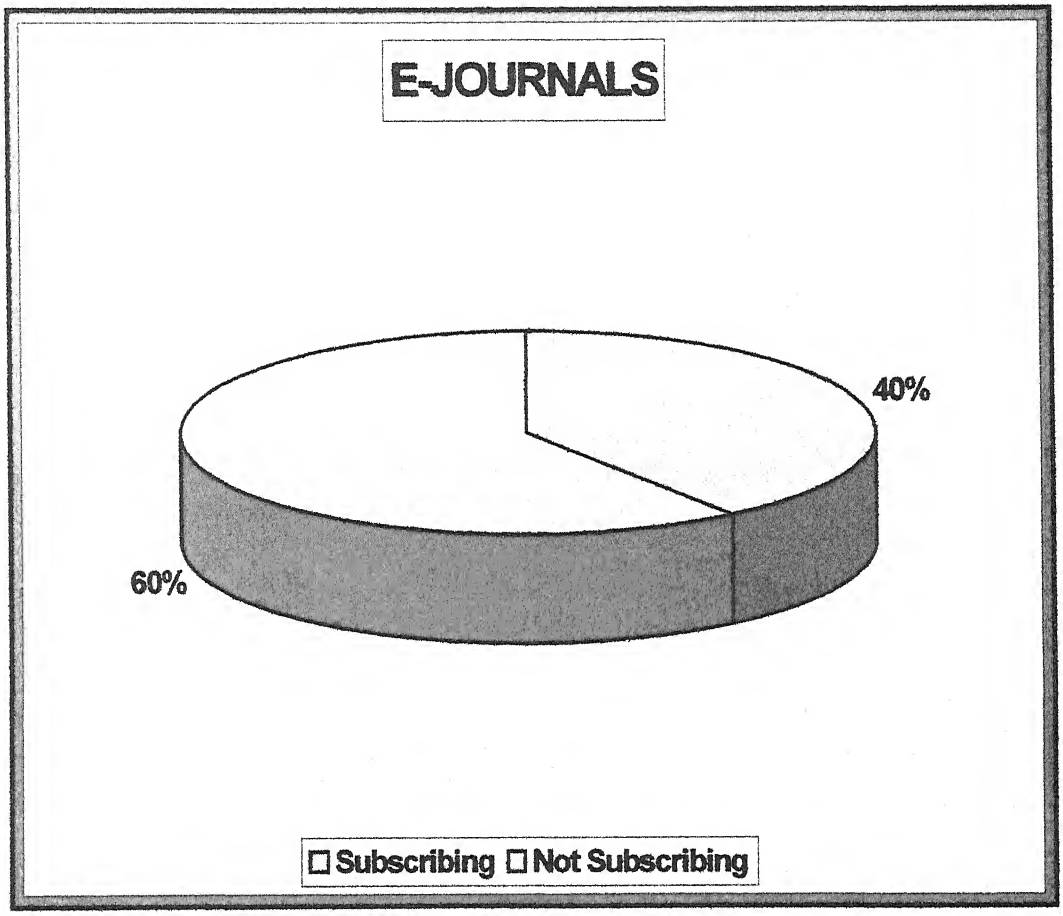

Fig.5.4

The figure depicts that out of 15 only, 40% (06) of University Libraries of U.P. are subscribing E-Journals whereas 60% (09) are not subscribing them.

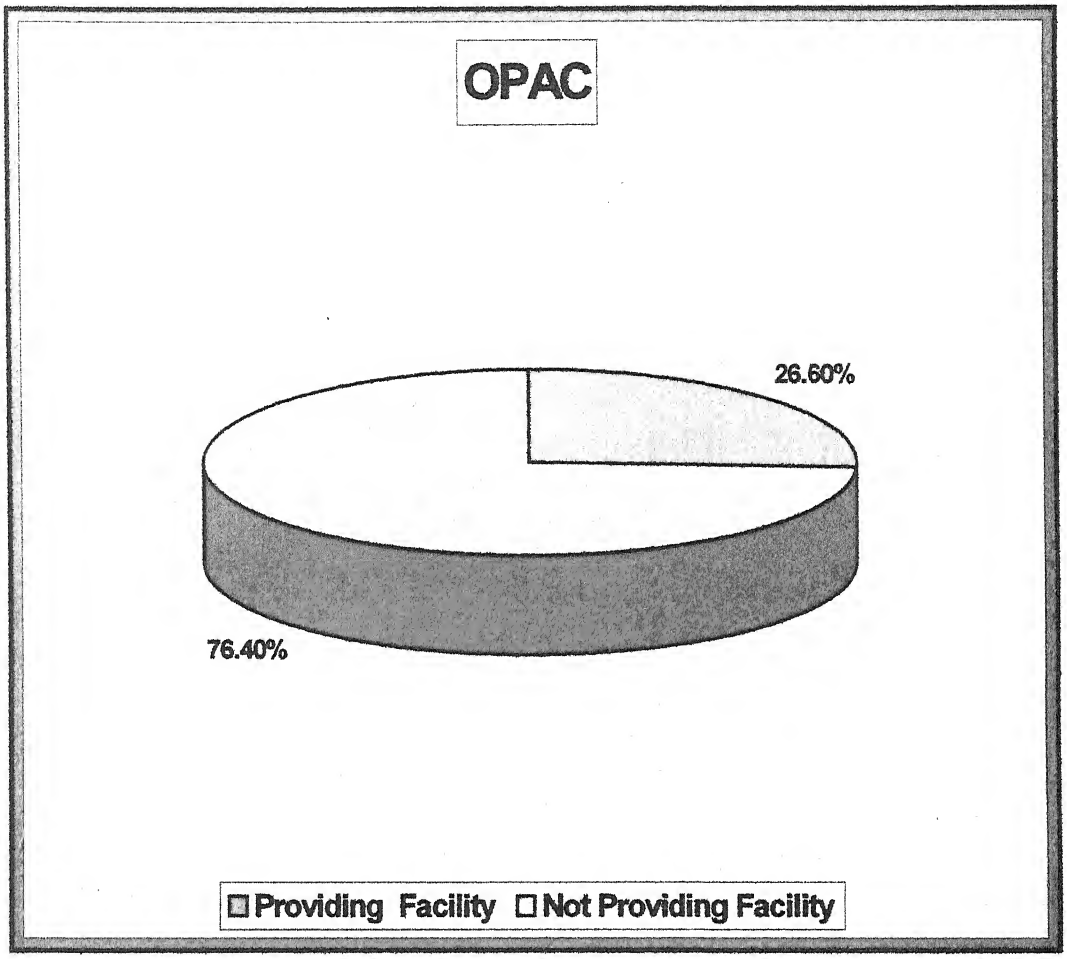

Fig.5.5

The figure shows that out of 15, 76.4% (11) University Libraries of U.P. do not have OPAC facility only 26.6% (04) have this facility.

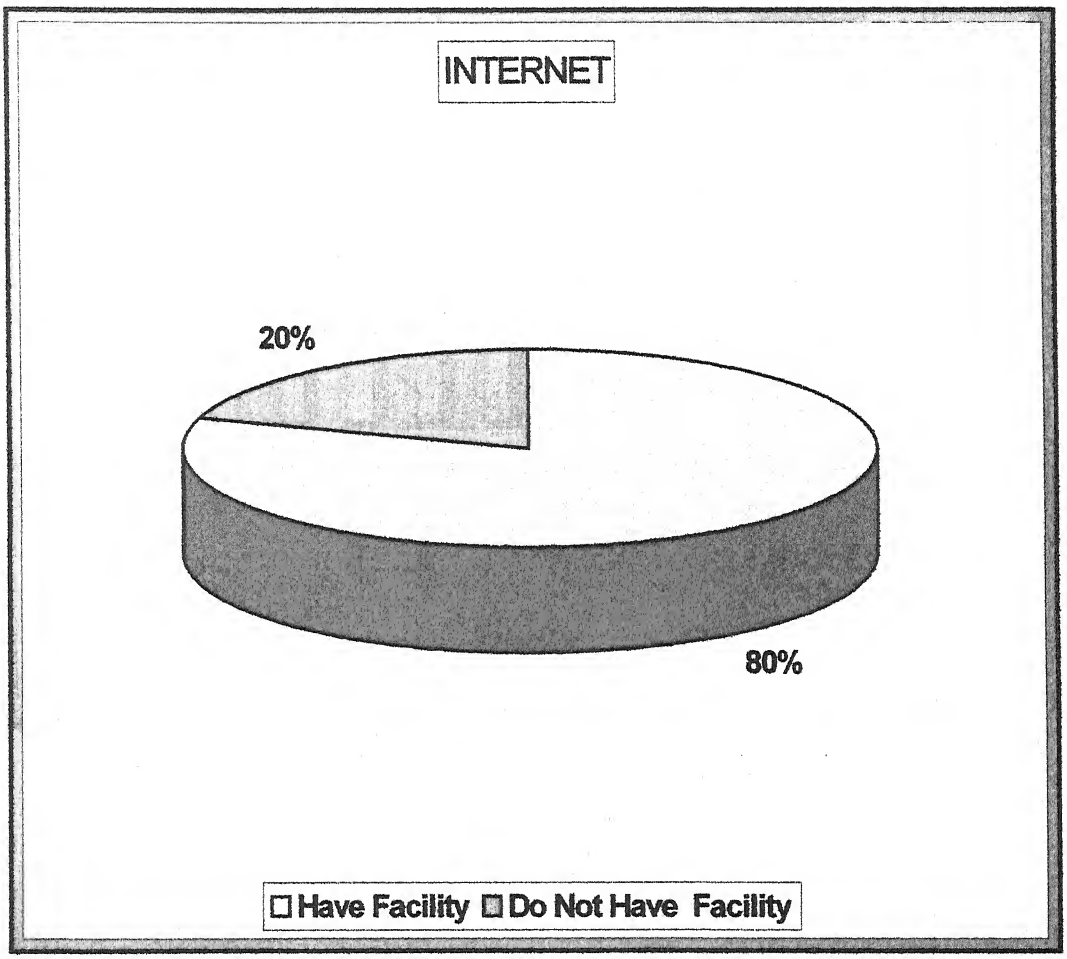

Fig.5.6

The figure highlights that out of 15, 80% (12) University Libraries of U.P. are providing Internet service whereas 20% (03) are not providing this service.

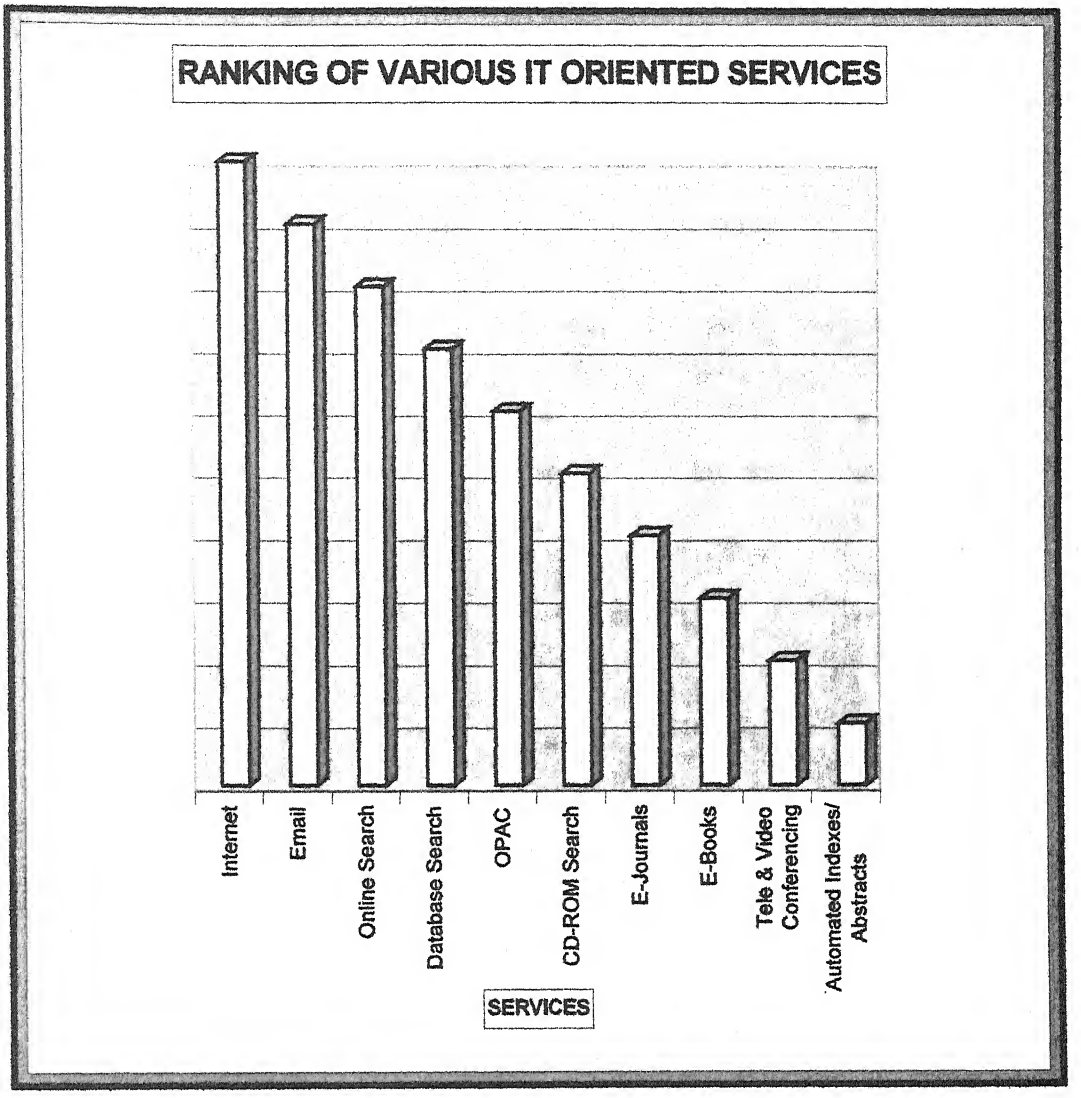

Fig 5.7

The above figure shows the response of Librarians regarding the ranking of various IT oriented services. The given rank is provided according the use of these services by users in the University Libraries of Uttar Pradesh.

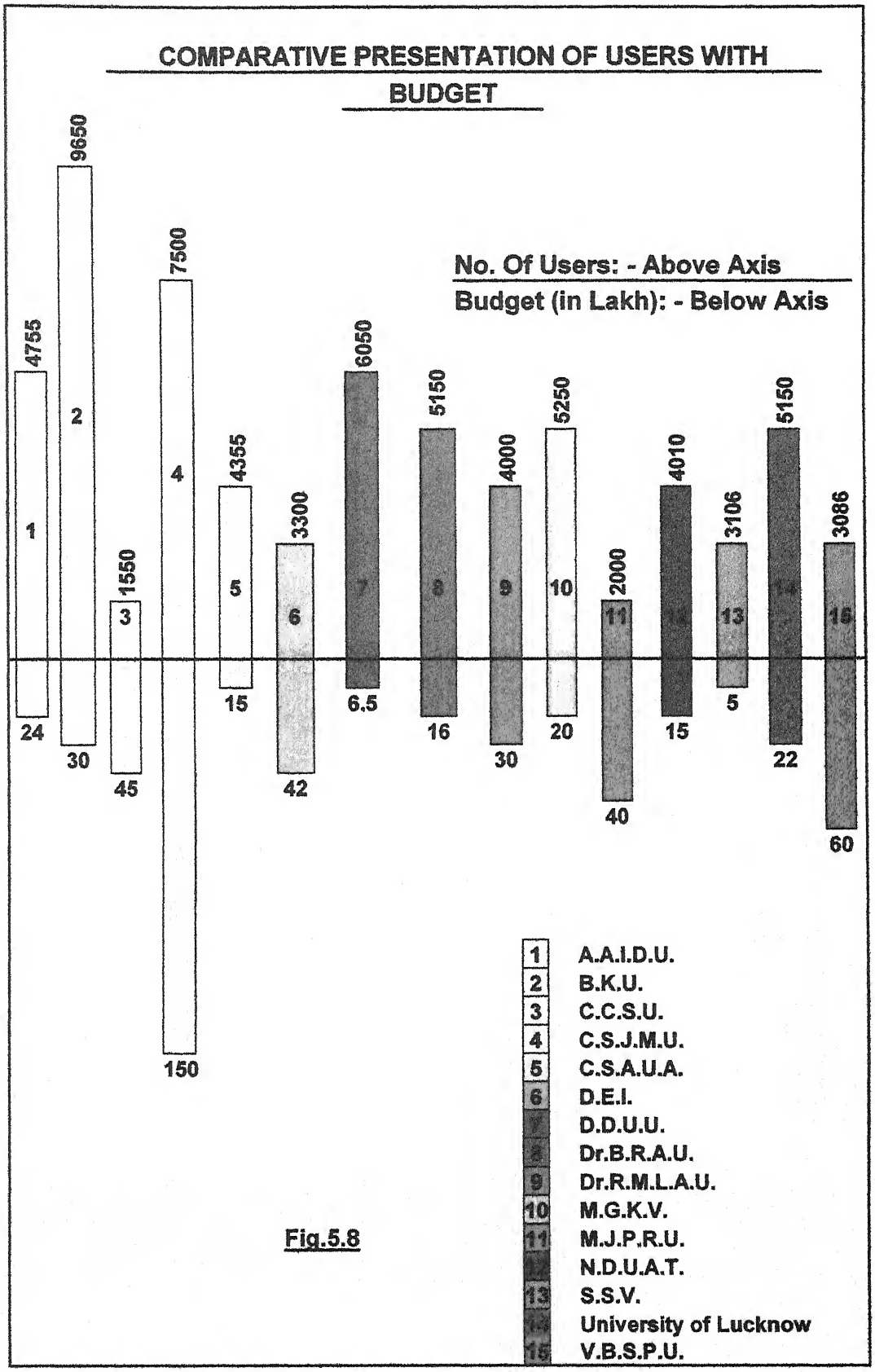
COMPARATIVE PRESENTATION OF USERS WITH BUDGET
No. Of Users: - Above Axis
Budget (in Lakh): - Below Axis
4755
1
24
9650
2
30
1550
3
45
7500
4
150
4355
5
15
3300
6
42
6050
7
6.5
5150
8
16
4000
9
30
5250
10
20
2000
11
40
4010
12
15
3106
13
5
5150
14
22
3086
15
60
1 A.A.I.D.U.
2 B.K.U.
3 C.C.S.U.
4 C.S.J.M.U.
5 C.S.A.U.A.
6 D.E.I.
7 D.D.U.U.
8 Dr.B.R.A.U.
9 Dr.R.M.L.A.U.
10 M.G.K.V.
11 M.J.P.R.U.
12 N.D.U.A.T.
13 S.S.V.
14 University of Lucknow
15 V.B.S.P.U.

Fig.5.8

COMPARATIVE PRESENTATION OF USERS WITH COMPUTERS

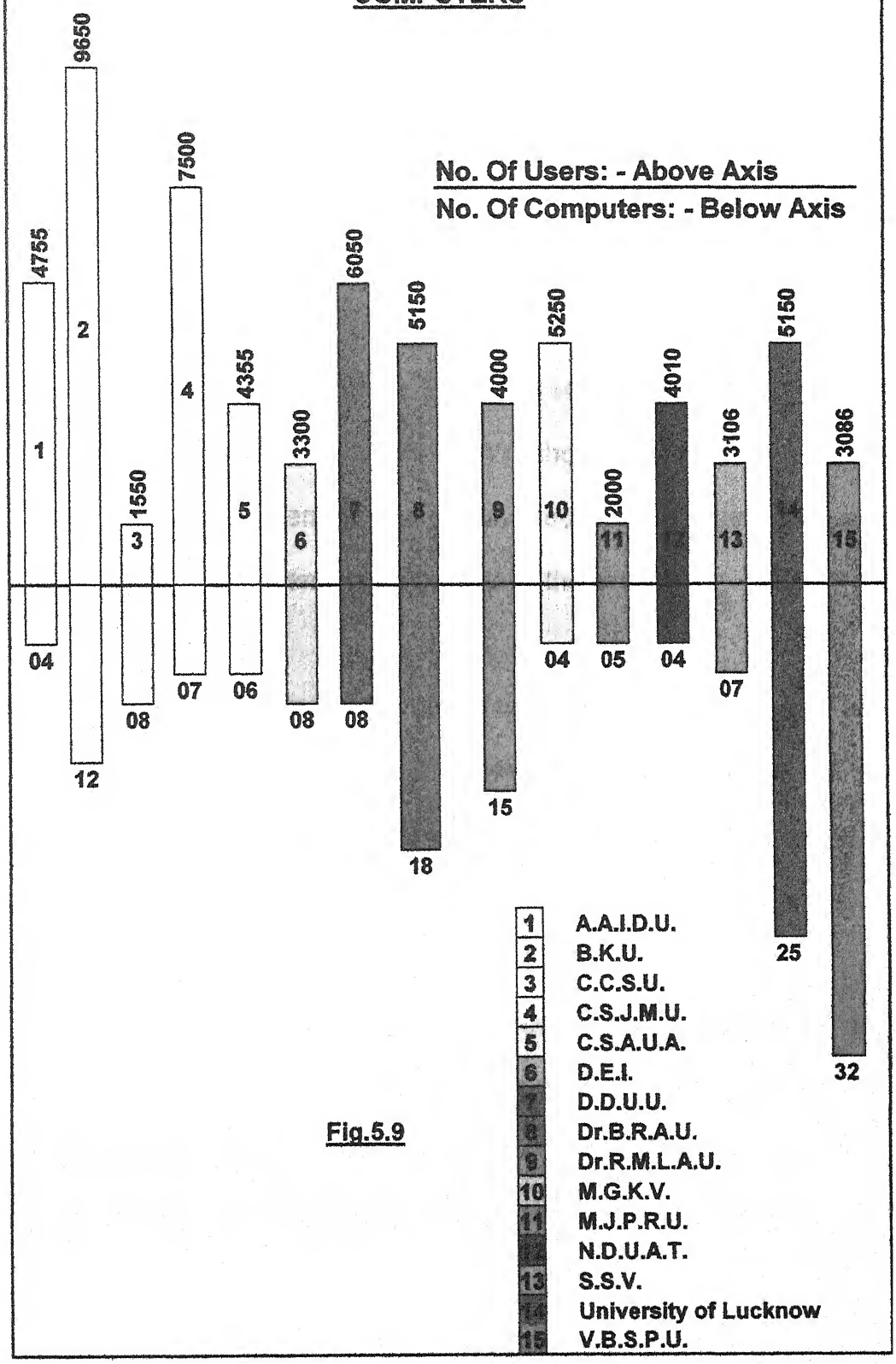

Fig.5.9

Variables	Rank Correlation(r)	$t = (n-2) / \sqrt{1- r^2}$
XY	-0.064	-0.0833
YZ	0.00	0.00
XZ	-0.311	-4.25

Conclusion: -

1. The value of r between the "No. of users during 2004-05(X)" and "No. of computers in the library (Y)" shows that there is negative correlation between the two, which means there is not adequate number of computers in comparison to the users.

2. The value of r between the "No. of computers in the library (Y)" and the "budget of library during 2004-05(Z)" shows that there is no correlation between the two, which means the budget is very less to what is actually required.

3. The value of r between the "No. of users during 2004-05(X)" and the "budget of library during 2004-05(Z)" shows that there is negative correlation between the two, which means there is not adequate amount of budget available in comparison to the users.

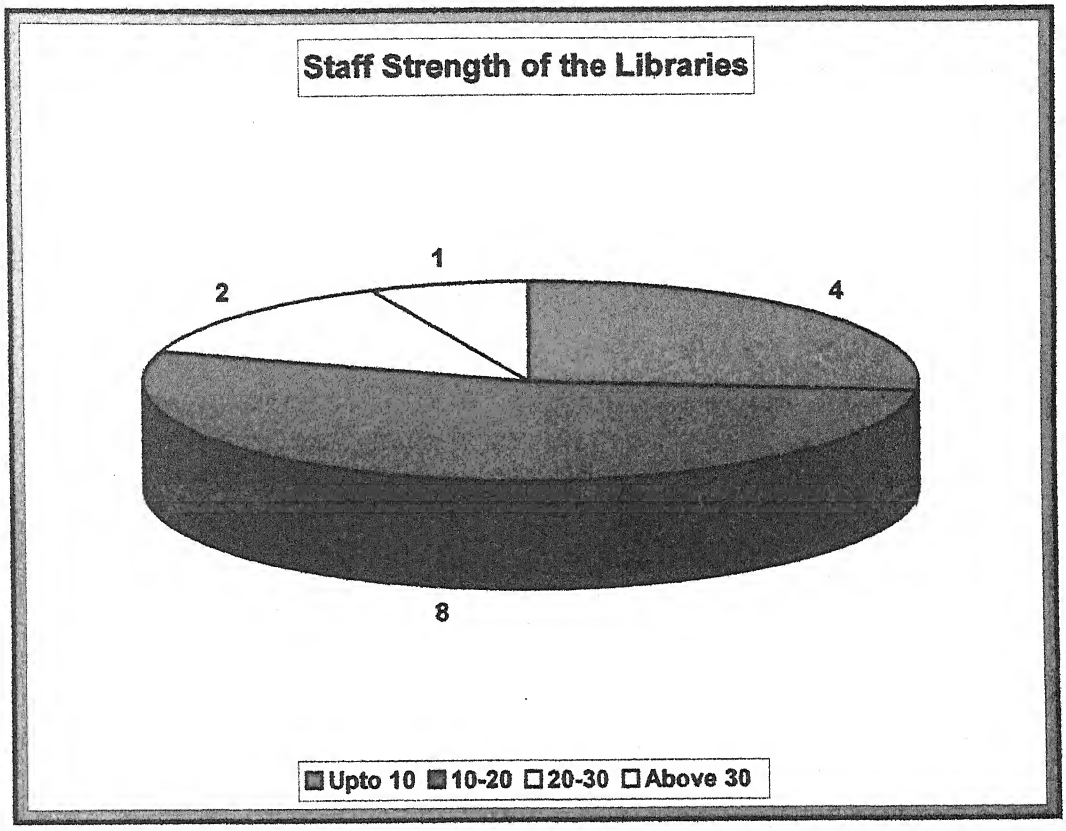

Fig.5.10

The above figure shows that out of 15 University Libraries of U.P., 04 have staff strength of up to 10, 08 have between 10-20, 02 have between 20-30 and only one have above 30.

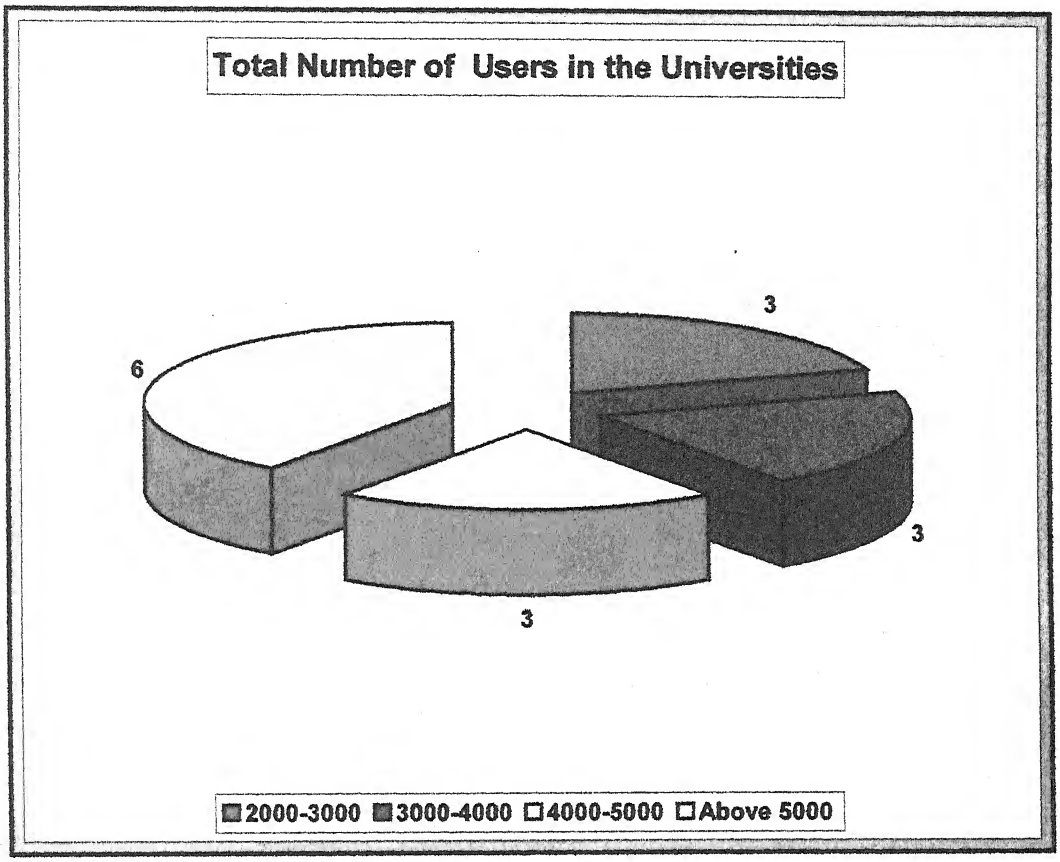

Fig 5.11

The above figure presents the view of total number of users in University Libraries of U.P., 03 libraries have users between 2000-3000, 03 have between 3000-4000, 03 have between 4000-5000 and 06 libraries have users above 5000.

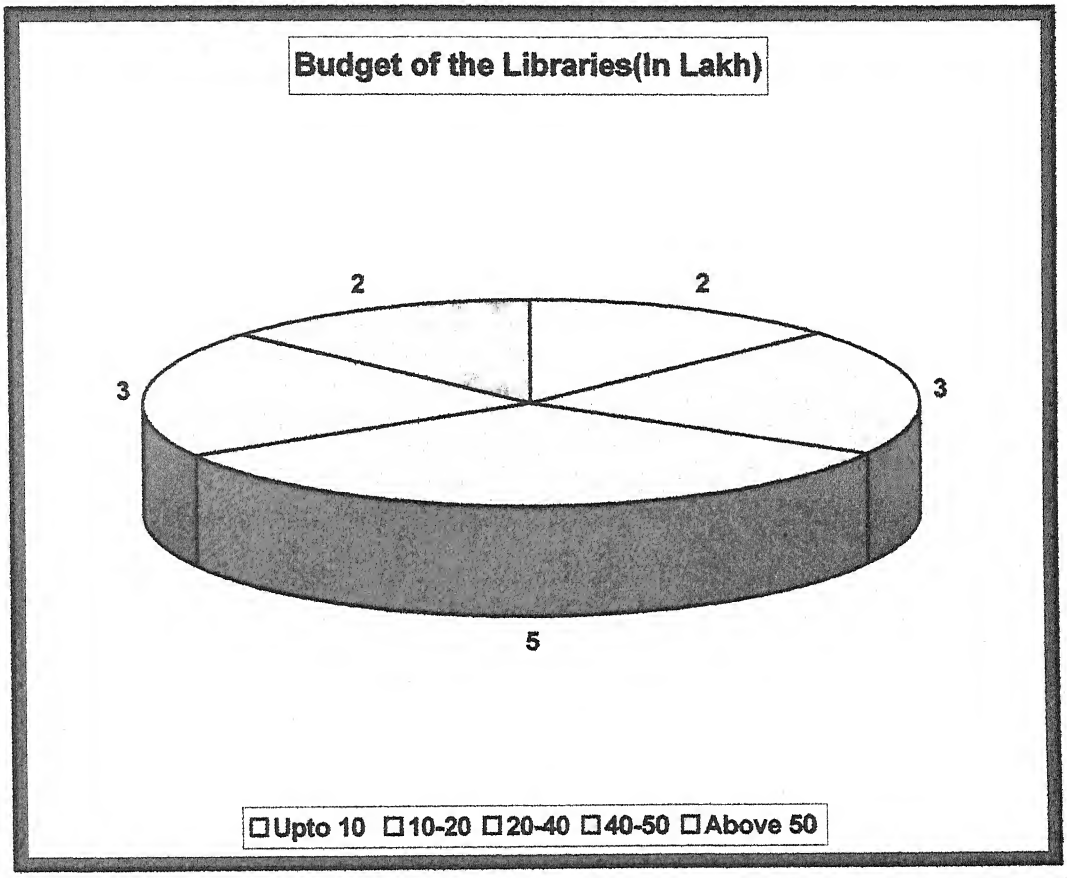

Fig.5.12

The above figure depicts the status of Budget in the University Libraries of U.P., 02 libraries have budget up to 10 lakh, 03 have budget between 10-20 lakh, 05 have between 20-40 lakh, 03 have budget between 40-50 lakh and only 02 libraries have budget above 50 lakh.

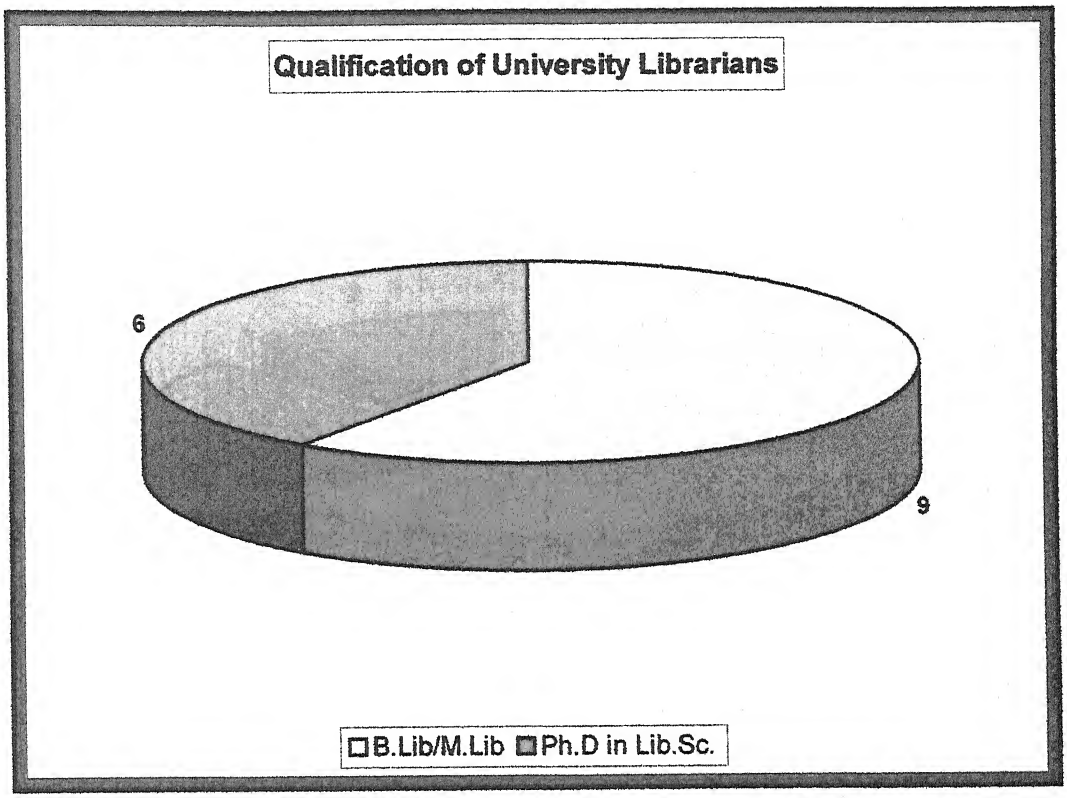

Fig.5.13

The above figure shows that out of 15 University Libraries of U.P., 09 have librarians with qualification B. Lib. / M. Lib. and only 06 are Ph.D in library science.

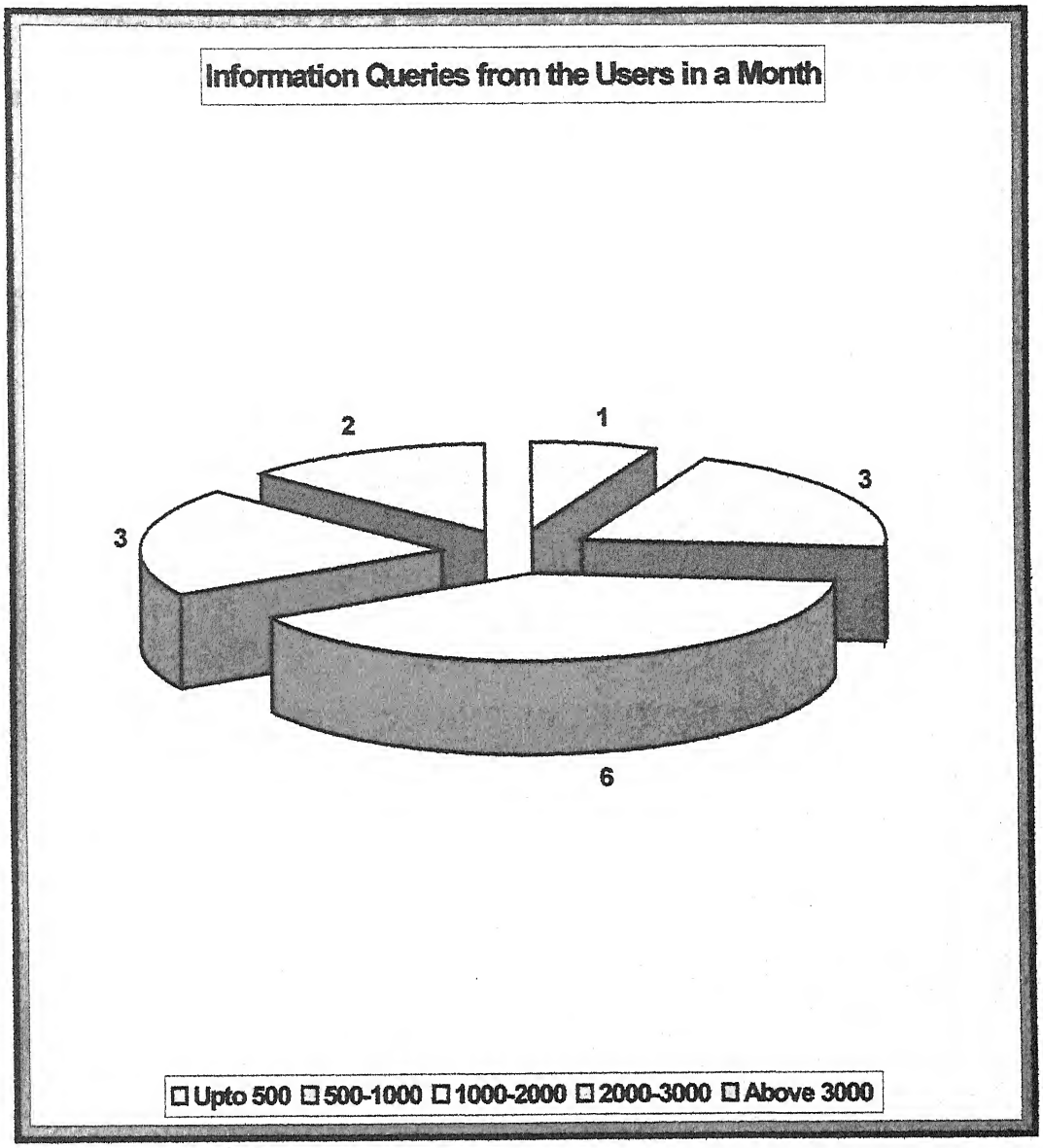

Fig.5.14

The above figure presents the status of Information queries received from the Users by the University Libraries of U.P. in a month. 01 library receives query up to 500, 03 libraries between 500-1000, 06 libraries between 1000-2000, 03 libraries between 2000-3000 and only 02 libraries above 3000.

The figure no. 5.15 –5.22 presents the data regarding the increase in the number of Users during last four years in the University Libraries of U. P. those are linked with INFLIBNET.

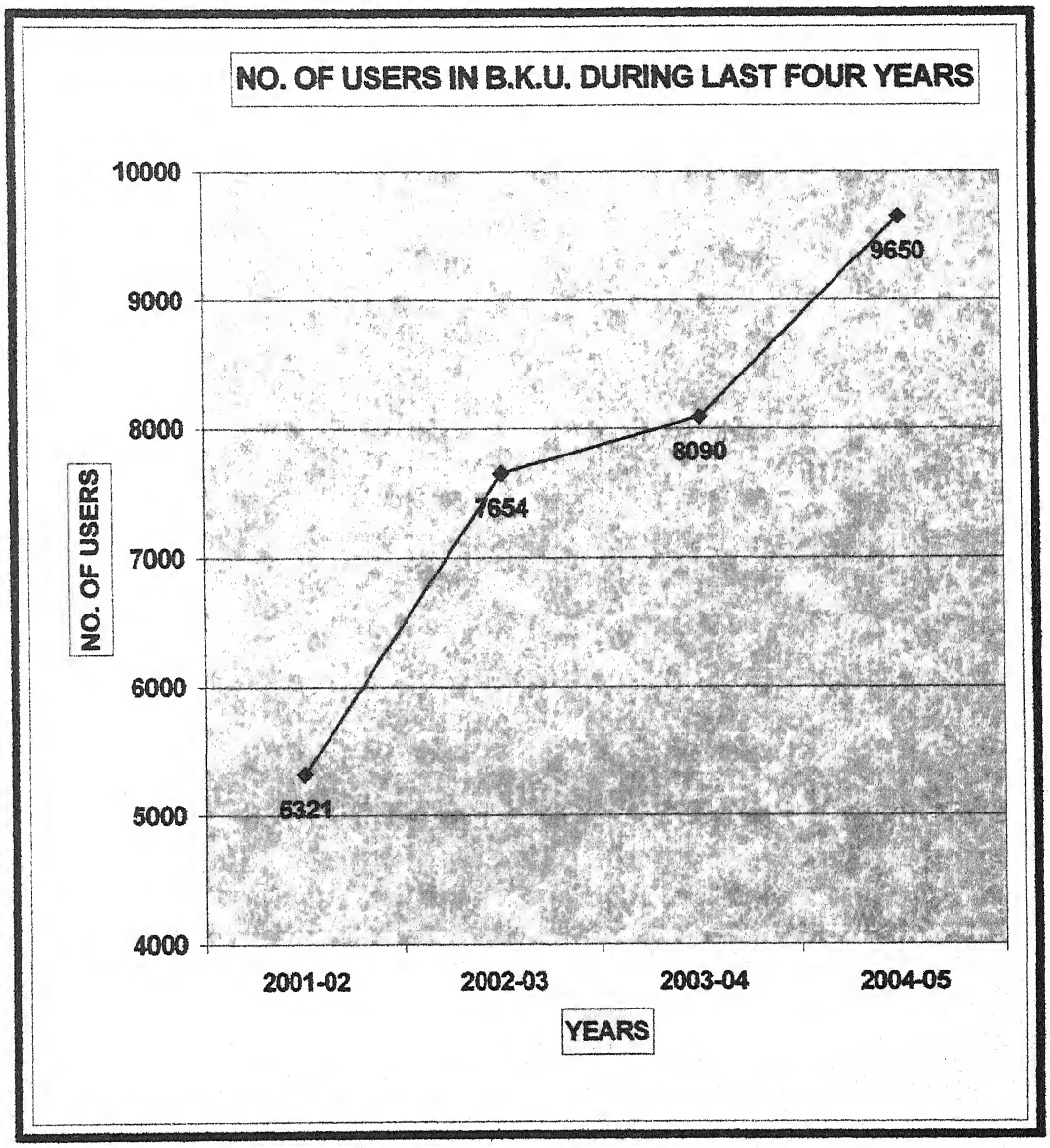

Fig.5.15

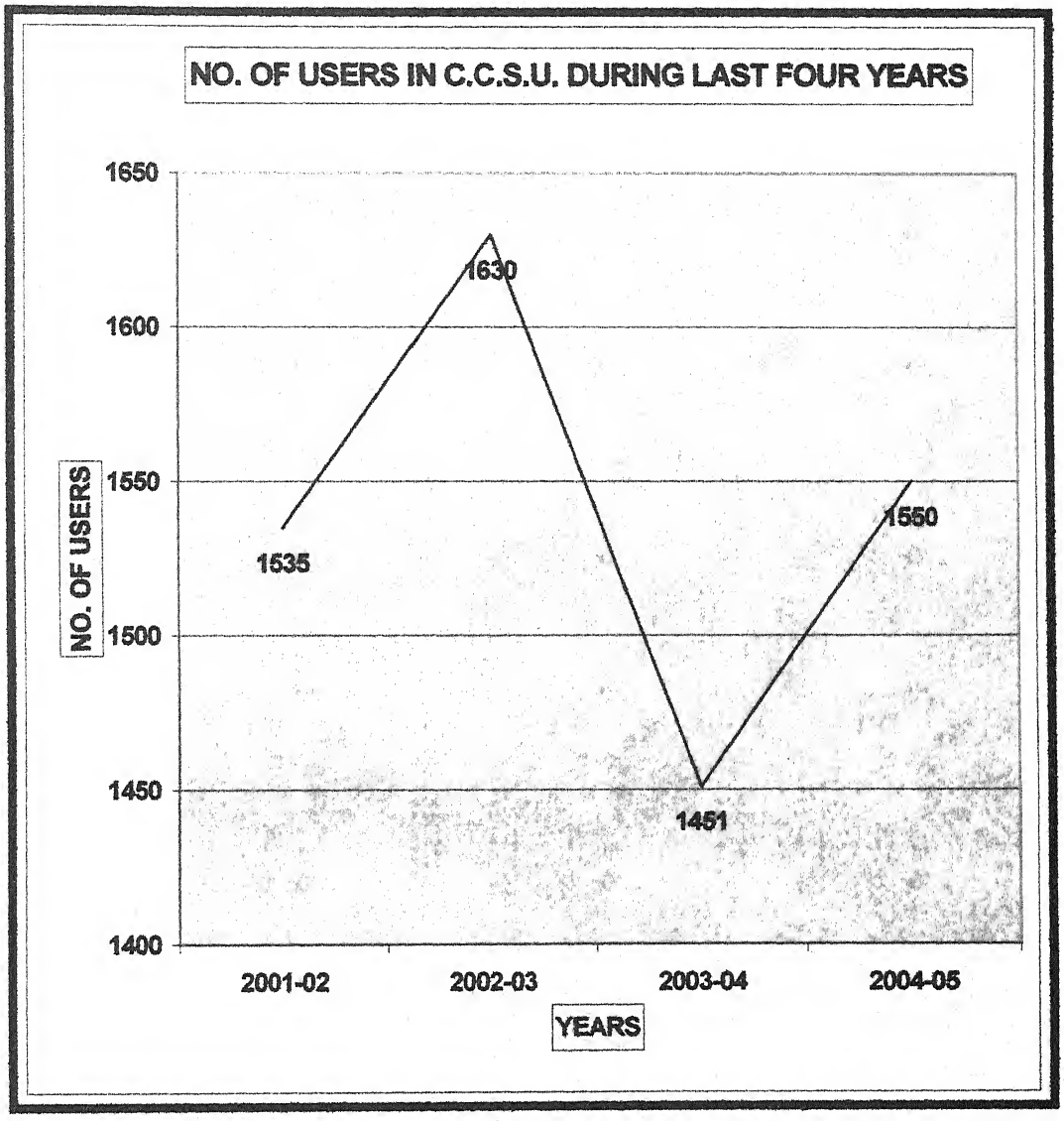
NO. OF USERS IN C.C.S.U. DURING LAST FOUR YEARS
NO. OF USERS
1650
1600
1550
1500
1450
1400
1535
1630
1451
1550
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.16

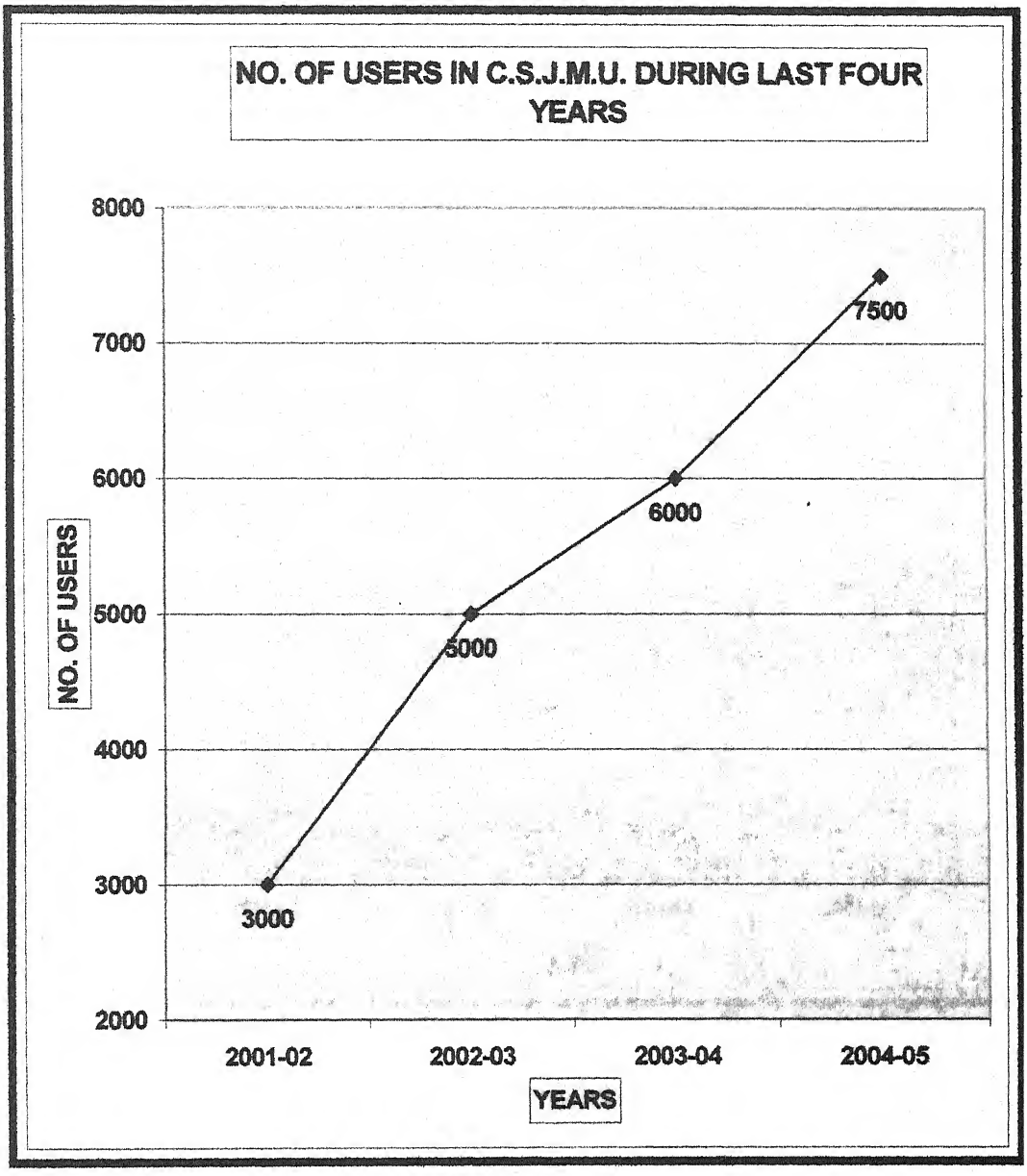
NO. OF USERS IN C.S.J.M.U. DURING LAST FOUR YEARS
8000
7000
6000
5000
4000
3000
2000
NO. OF USERS
3000
5000
6000
7500
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.17

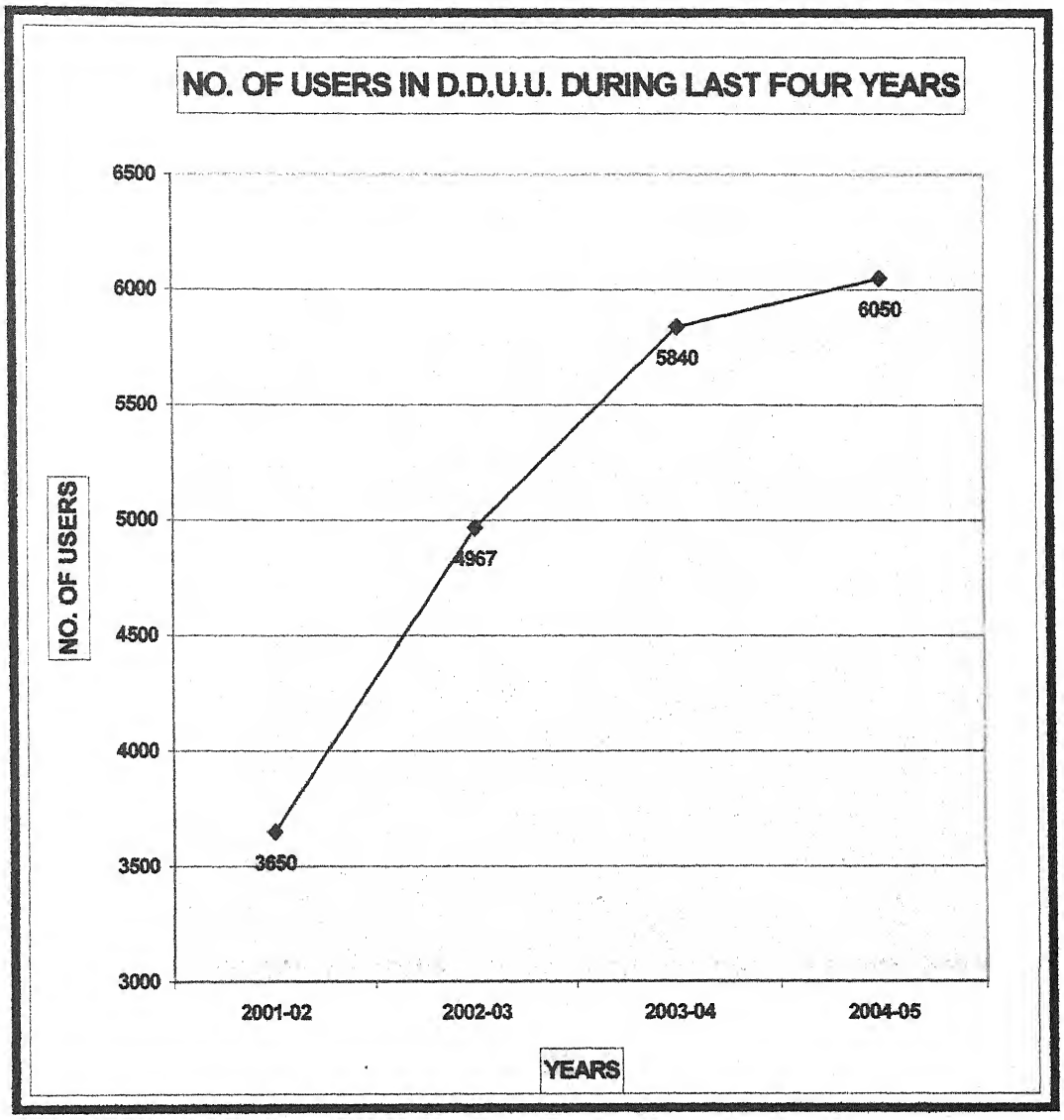
NO. OF USERS IN D.D.U.U. DURING LAST FOUR YEARS
NO. OF USERS
6500
6000
5500
5000
4500
4000
3500
3000
3650
4967
5840
6050
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.18

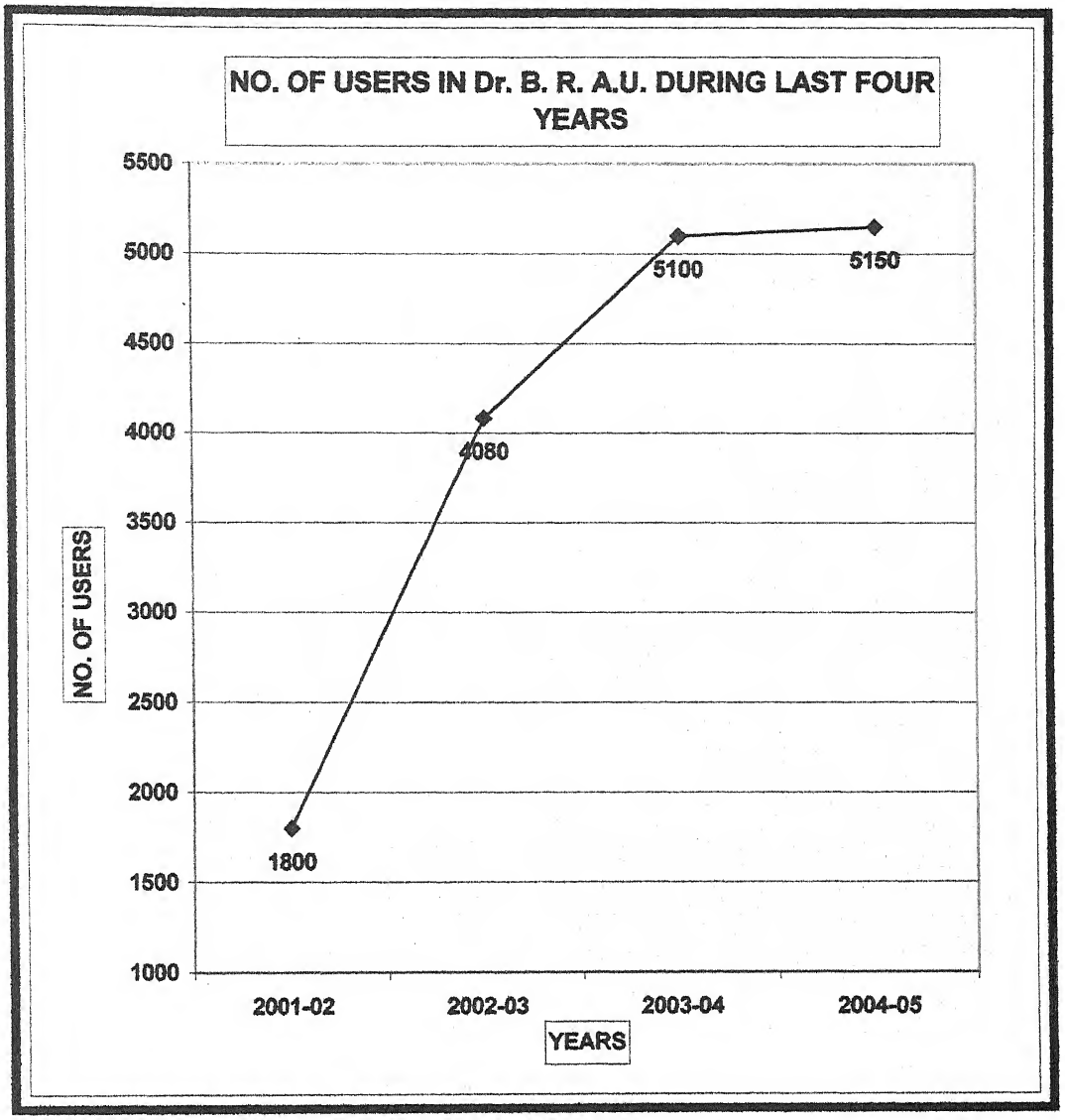
NO. OF USERS IN Dr. B. R. A.U. DURING LAST FOUR YEARS
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
NO. OF USERS
1800
4080
5100
5150
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.19

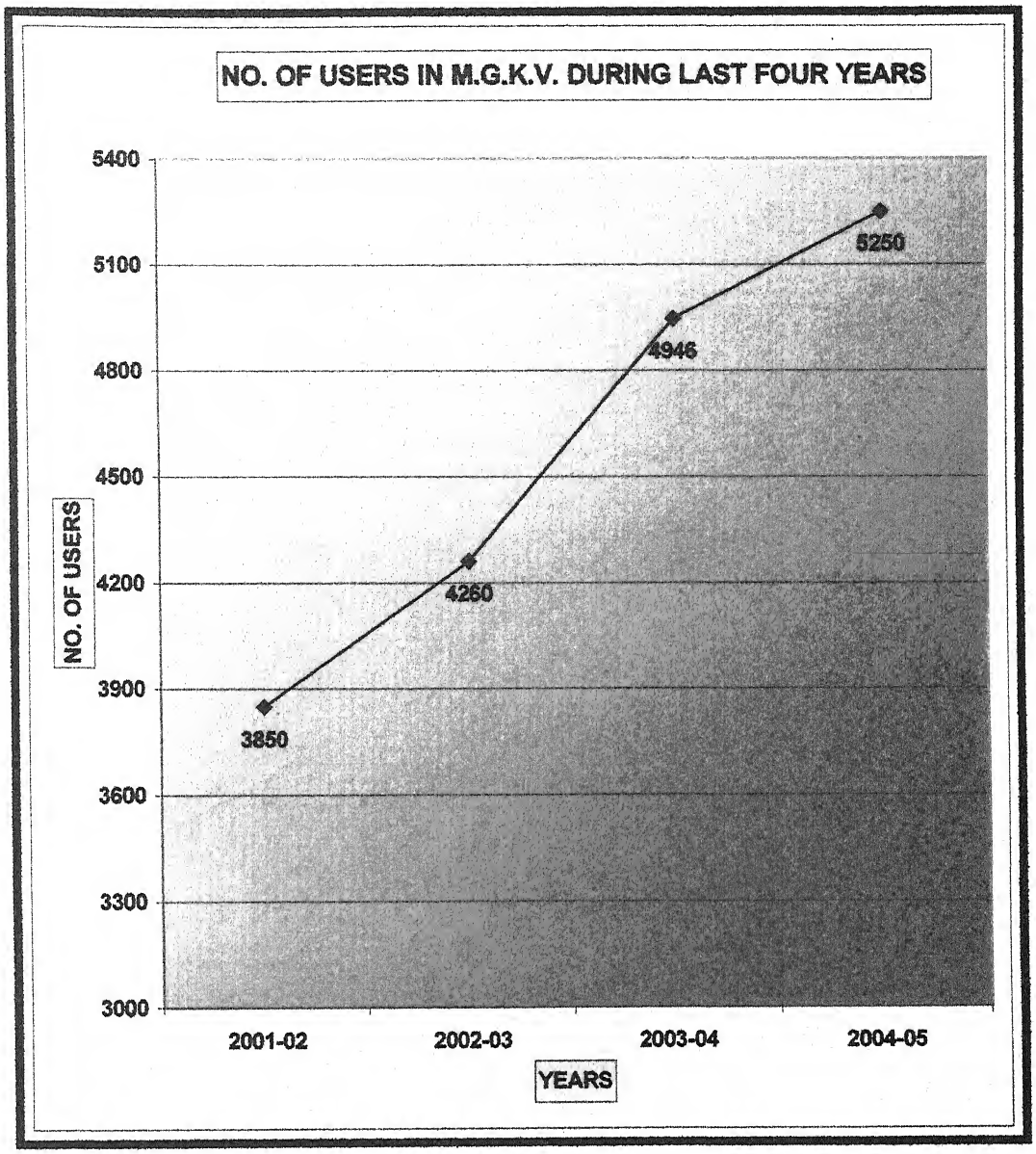
NO. OF USERS IN M.G.K.V. DURING LAST FOUR YEARS
5400
5100
4800
4500
4200
3900
3600
3300
3000
NO. OF USERS
3850
4260
4946
5250
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.20

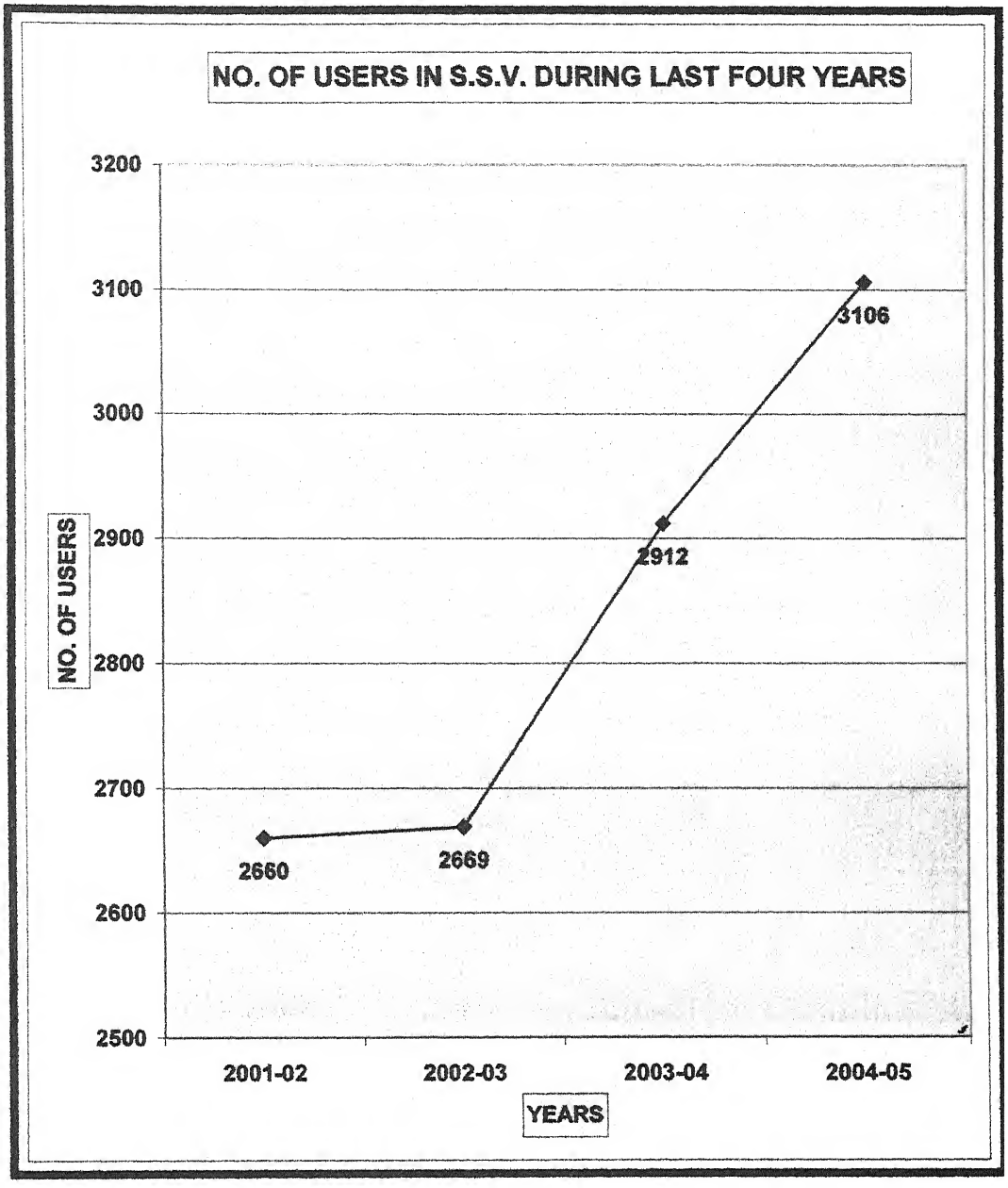
NO. OF USERS IN S.S.V. DURING LAST FOUR YEARS
3200
3100
3000
2900
2800
2700
2600
2500
NO. OF USERS
2660
2669
2912
3106
2001-02
2002-03
2003-04
2004-05
YEARS

Fig.5.21

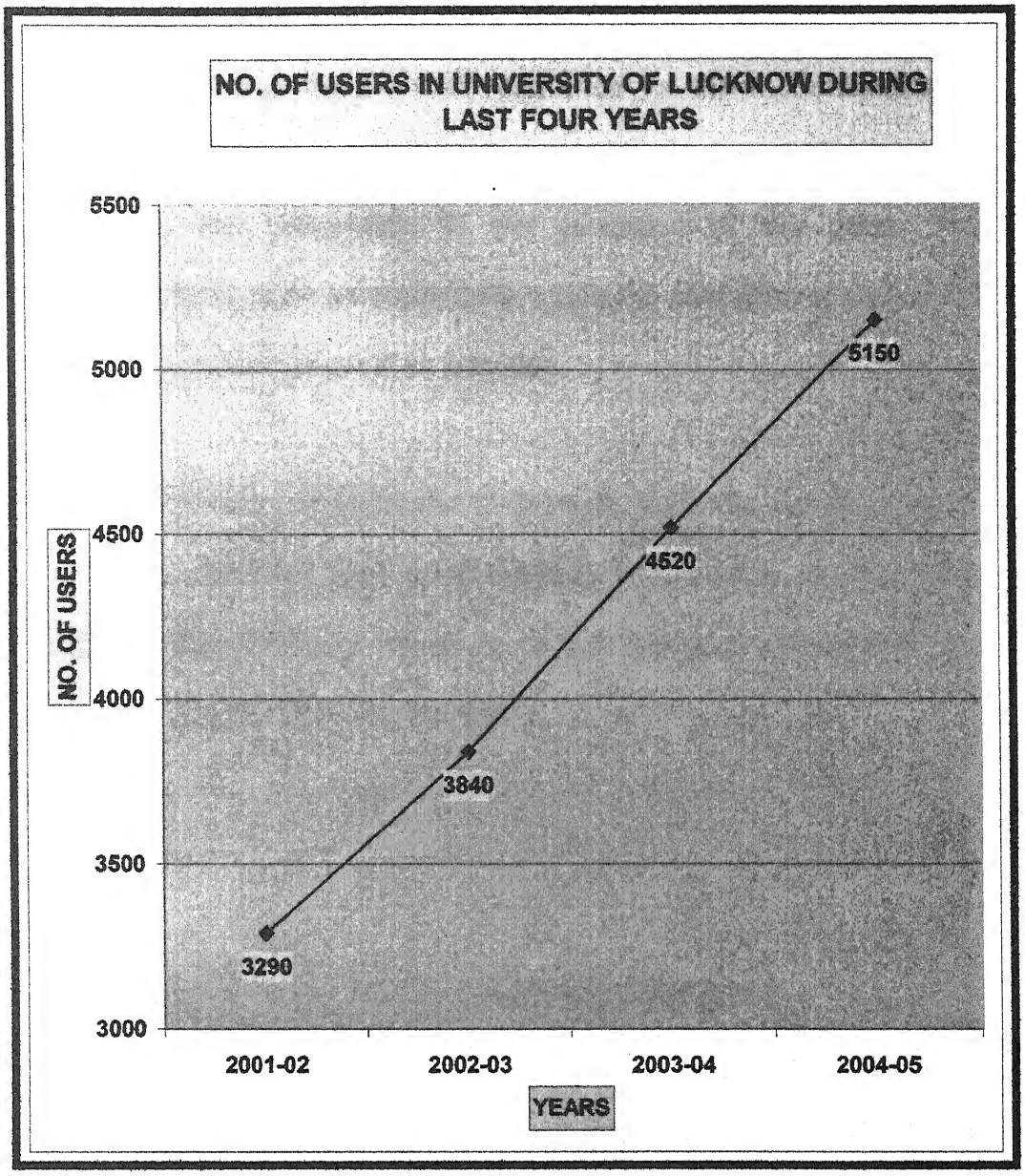

Fig.5.22

The conclusion derived from these figures is that there is increase in the number of Users in all the University Libraries, although other factors are also responsible for this increase but foremost factor is the better services of these libraries. These services are provided due to the help and assistance of INFLIBNET.

(5.2). Problems: -

While granting the financial assistance for the modernisation of libraries, INFLIBNET has suggested some guidelines and given certain autonomy to the Universities in the allocation of the grant. The Universities, taking such an opportunity, made the allocation of such grant for different purposes as per their priorities.

Over the years, the progress of the work is steady, but as it seems, not up to the expected level of INFLIBNET. The reasons may be many and varied. The following are some of the problems observed in the implementation of the above programme.

(1). Grants: -

(1.1). Lack of clear cut policy in the allocation of the grant;

(1.2). Lack of sufficient exercise in the identification of nature of expenditure involved in this regard;

(1.3). Transfer of allocated amount from one head to another;

(1.4). In some cases, money spent for items which are not relevant to this programme;

(1.5). The total grant was kept in the University general A/C instead of keeping it in a separate A/C. As a result, this money has been spent for some other items in emergency;

(1.6). The money allocated for certain purpose was not sufficient in certain cases;

(1.7). There is no continuous monitoring of requirements and expenditure in this regard;

(1.8). As a result of improper planning, more money has been spent on some items and some work remains to be completed;

(1.9). No money for meeting the expenditure relating to repairs, replacement, and spare parts of computers;

(1.10). Availability of limited budget and increasing cost of the system are found in the survey.

(2). <u>Databases: -</u>

The development of databases is not free from problems. There are a number of issues and problems that are involved in the process,

which are faced, by both INFLIBNET and the participating libraries. An attempt has been made to list a few major issues involved, which are hampering the progress: -

(2.1). Development of databases depends on the contribution of data by the participating libraries. It is necessary that every participating library, creates the database of collection held in their library and the same is contributed to INFLIBNET on a regular basis. There are quite a few Universities, who are yet to start creating databases, though they have been provided with hardware, software and training etc. in the early years of the programme. This directly affects the growth of the project;

(2.2). The quality of the data supplied by the libraries, with regard to format, rendering the information at field and sub- field levels is far from desired. It is essential to follow standards recommended by INFLIBNET and to contribute the quality data;

(2.3). The data is too large to handle and is in different languages (scripts). Hence creating a database to serve the national needs at various levels is a complex job;

(2.4). Often, libraries send incomplete data. Even the mandatory fields such as author title and publisher are missing. In the absence of actual document or other source, it is difficult for INFLIBNET to complete such records and add to the union database;

(2.5). Like in developed countries, there is no single agency in the country, which can create the records in machine readable form and the same could be used by all the libraries including INFLIBNET and therefore avoid the duplication in the work and at the same time achieve the quality;

(2.6). In spite of providing intensive training in bibliographic standards, software and other related areas, there still remains a gap in understanding the importance of quality concept and utilisation of software for database creation at the libraries;

(2.7). Some libraries are using commercially or in-house developed library management software, which do not adhere to the standard format (though they claim to have) and do not have provision to render the information as per AACR-2. As a result libraries are unable to contribute the data in ISO-2709 format;

(2.8). The database building work is also not properly planned and executed;

(2.9). There are cases, where the University authorities have not released the grant to meet the expenses in time. Hence, database creation work is hampered;

(2.10). Money is not sufficient for database creation work;

(2.11). Recurring grant is not released in time, which causes the delay in the data entry work;

(2.12). There is an assumption that, data entry is done by the University and authentication part will be taken care by the INFLIBNET, which is not the case. INFLIBNET can provide sufficient guidelines assistance and only if necessary can handle global correction. But, authenticating such a large volume of data received from Universities is not practical and possible;

(2.13). Lack of authority files, particularly for Indian names, leads to lot of inconsistency and duplication in creation of databases.

(3). **IT and related areas: -**

(3.1). Computers are wore out and outdated in view of the work to be carried out;

(3.2). Lack of proper infrastructure, space, continuous power supply, telecommunication facility, etc. are some of the major problems faced by many University Libraries;

(3.3). Most of the Universities expressed difficulty in automation, because of the lack of suitable library management software in the country. SOUL software developed by INFLIBNET has been priced at Rs. 50,000/-, which many libraries cannot afford to buy;

(3.4). The issue relating to up gradation of old systems provided to the Universities funded till 1996-97 also came up as a part of overall progress of the Universities. Initially these Universities were suggested to purchase one 486 server and 386 as clients with SCO UNIX operating system. All these systems are now old and obsolete and are not compatible to run SOUL, which works in Windows NT environment. Many Universities have expressed their difficulty and requested for financial support for up gradation of their systems, and also for acquiring MS SQL and Windows NT;

(3.5). Lack of proper guidelines and planning for computerisation of library automation activities;

(3.6). Late implementation of library automation activities;

(3.7). Non-availability of latest database server and nodes with high storage capacity;

(3.8). Cumbersome purchase procedure for acquisition of computer systems;

(3.9). Computers selected and acquired by the people who are not aware of library requirements;

(3.10). Non-availability of heavy duty UPS to sustain data entry work;

(3.11). Non-availability of good library application software on low price.

(4). Services: -

(4.1). In view of the services viz. Internet, E-mail, CD-ROM there appears need to acquire latest computers which are compatible for the work. Up gradation of computers is also essential in view of the adoption of "SOUL" software (developed by INFLIBNET) in University Libraries; hence some special assistance grant should be sanctioned to libraries;

(4.2). Most of the Universities are unable to use existing network connection to provide services. Presently most of them are providing E-mail based services. In order to provide network access to literature, they require network access with wider bandwidth to enable sharing of resources and offer proper services to users. Librarians emphasized on installation of VSAT network by INFLIBNET as early as possible;

(4.3). Users feel that the number of computer (machines) available in the library is limited thereby creating problem in the use of the same;

(4.4). Users feel many difficulties in the use of services offered by INFLIBNET even access to OPAC by different users is quite

negligible. This may be due to their lack of knowledge about the services and training to use it.

(4.5). Most of the users are found not to be aware of COPSAT service.

(5). Staff: -

(5.1). Large number of University Libraries are without the senior staff (i.e. at the level of Librarians and Deputy Librarian) who could take required initiatives, appropriate decisions and guide the implementation of work in this area;

(5.2). It is found in survey that many Universities are lacking in system specialist, Computer Engineers, Programmers and other manpower who could deal with other peripherals of computers like UPS, batteries etc. if any of the item related to computer causes trouble, librarians has to do a lot of paper work, like authorities approval for the work and quotations of the parties (for a small work or just for inspection private companies do not turn up) this causes hindrance in the work of Librarians;

(5.3). Many libraries are finding it difficult to the concurrence for the state government to fill up the post of Information scientist;

(5.4). Lack of qualified professionals for part time data entry work in less remuneration;

(5.5). Delay in the appointment of Information Scientist and part time data entry operators under INFLIBNET programme;

(5.6). Regularization of the post of Information Scientist;

(5.7). Lack of compulsory training to other library staff for data creation work;

(5.8). In many cases staff himself is not aware of the services offered by INFLIBNET.

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(2). **INFLIBNET Newsletter.** Ahmedabad, INFLIBNET centre (UGC). Jan-Mar, 2001. Vol.7 (1) p.5.

(3). **INFLIBNET Annual Report.** 2000-2001. Ahmedabad, INFLIBNET centre.

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(5). **Information Today and Tomorrow** (ISSN 0971-7102) Vol.21 no.1, Mar 2002 p.13-14.

(6). **IASLIC Bulletin** Vol. 41 (3) 1996. p.35.

CHAPTER-6

CONCLUSION

SUGGESTIONS

Chapter 6

Conclusion And Suggestions

To be successful in the present century, Libraries have to be more proactive and more customer service oriented. The complex challenges of the next ten to twenty years require creative leadership, drawing the best from both library leaders and followers in order to meet the demands of their situations and achieve goals. It is time to reevaluate service models that have functioned for years. Being prepared to manage changes can furnish us with the ability to flourish. We should attempt to reestablish standards, criteria or benchmarks that are considered to be basic to quality library services. Academic libraries in the 21st century need to be learning organisations.

With the introduction of computers in the libraries and UGC-INFLIBNET initiative in networking and access to scholarly literature most of the libraries, can achieve required goals, if they can take maximum benefit out of these initiatives. It is observed that there was a lack of leadership and enthusiasm among the libraries and librarians in the beginning. However the situation in the University system has now changed. They have realized the importance of centre like INFLIBNET and need for library automation has been taken serious view by these libraries during the last couple of years which has been shown in the

progress made by these Universities in terms of database creation, connectivity to network and motivation among the libraries to embark upon the new technology. They are able to map up their libraries with the INFLIBNET objectives. The initiative of UGC-INFONET and E-Subscription to Journals for the University Libraries brings the Universities and INFLIBNET much closer to support the academic and research community in the country. The success of SOUL software in the libraries is another big achievement to bring the Universities together in the use of uniform software and ensure the quality record creation by libraries for union databases of INFLIBNET and provide access.

The University Libraries nurture the vast academic community, which constitutes the core of intelligentsia. All activity, both of teaching and research, is built around the libraries. The standards of higher education largely depend upon the role of the library. The vast human resource who are responsible to foresee, plan, administer and execute research and development activity, both in government departments and outside, are the products of Universities and they were the users of University Libraries at some point of time or the other. Their ideology and outlook is entirely molded by the libraries. Such vital towers of information should be updated in their collection and modern in their administration and services to create men and women necessary to keep India abreast of developments elsewhere in the world.

The Hypotheses of the present study are being tested whether they stand accepted/proved or rejected/disproved. The following are the hypotheses of the study: -

(1). The University libraries as compared to others are far behind in providing technological and qualitative services to the users.

(2). The facilities available at present are quite inadequate.

(3). Majority of the libraries requires infrastructural facilities for IT implementation.

(4). The IT implementation in the academic libraries is at infancy

(5). INFLIBNET programme is an oasis in the dwindling future of libraries and is a boom to University Libraries.

(6). Development of regional network is the only economical and feasible solution to cater to the information needs of different categories of users.

(7). INFLIBNET is moving towards sorting out the financial resources of the University Libraries.

(8). The involvement of INFLIBNET in framing the manpower is a major break through.

(9). INFLIBNET library software SOUL is tailor made for University libraries and is capable of meeting all the in-house activities of them.

(10). The grant provided by INFLIBNET for library automation is utilised in for the purpose it has been sanctioned.

(11). INFLIBNET programme is having a telling effect on the IT oriented services in the University Libraries.

(12). INFLIBNET has been working as a national network particularly for University Libraries and their users in a true sense.

(13). The INFLBNET through its various regional, national meetings with librarians, vice-chancellors, teachers etc has created some awareness with respect to library resources, sharing and networking.

(14). Large numbers of libraries are computerizing their various library services, using the guidelines suggested by the INFLIBNET.

(15). INFLIBNET is for academic excellence, saving resources and equity.

(16). This project is designed to promote creation of conductive environment for library resource sharing.

(17). The University Libraries that are major partners in the development of union databases have a substantial role to play, to keep these databases growing both qualitatively and quantitatively.

(18). The participation and coordination of University Libraries is very essential for the successful implementation of this program.

(6.1). TESTING OF HYPOTHESIS: -

HYPOTHESIS 1: -

The perusal of several tables (viz. table no. 4.6, 4.20, 4.21, 4.22, 4.23 and figure no. 5.1, 5.2, 5.3, 5.5, 5.6) reveals that University Libraries are not providing very good services to its Users. Thus the Hypothesis Number 1 stands accepted or we may say the findings of the present study prove this Hypothesis.

HYPOTHESIS 2: -

It may be noted from table no. 4.2, 4.24 and figure no. 5.4 that the facilities available at present are not adequate according to the needs. Most of the University Librarians complained about lack of facilities. Thus the second Hypothesis of the present study is also supported by the findings of the study.

HYPOTHESIS 3: -

It is evident from table no. 4.10, 4.31, 4.34 and 4.38 and figure no. 5.9 and 5.10 that majority of the University Libraries requires infrastructural facilities for IT implementation. Hence this Hypothesis stands proved. In other words the results of the present study supports the Hypothesis.

HYPOTHESIS 4: -

Table no. 4.3, 4.4, 4.5, 4.29 and 4.30 indicates the status of IT implementation work in U.P. University Libraries. This work is in its beginning stage in majority of the Libraries. Thus the Hypothesis no. 4 is also accepted.

HYPOTHESIS 5: -

Table no. 4.27 reveals that INFLIBNET programme is very beneficial to University Libraries. From the interview of University Librarians it became clear that the Libraries condition have changed a lot after the assistance provided by INFLIBNET. Thus 5th Hypothesis is supported by the findings of the study.

HYPOTHESIS 6: -

The perusal of table no. 4.25 reveals that the development of regional network is very essential but the Libraries have not taken any initiative regarding this. Thus the Hypothesis no. 6 is partially rejected by the findings of the present study. In other words, in case of requirement it is accepted, whereas in case of implementation it is rejected.

HYPOTHESIS 7: -

Table no. 4.7, 4.15 and 4.16 reveals that INFLIBNET have funded 08 University Libraries in U.P with Non-Recurring Grants. But the Recurring Grants are not issued to majority of Universities. Thus the Hypothesis no. 7 is partially accepted and partially rejected.

HYPOTHESIS 8: -

It is evident from table no. 4.32, 4.33, 4.35 and 4.36 that INFLIBNET is providing training to Library staff but the University Libraries in U.P are not fully utilizing this facility of INFLIBNET. Thus the 8th Hypothesis is also partially supported by the results of the present study.

HYPOTHESIS 9: -

It may be noted from table no. 4.9 and figure no. 1.1 and also observed during the Libraries visit that SOUL software also have some limitations. Thus Hypothesis 10th stands disproved.

HYPOTHESIS 10: -

It is revealed from table no. 4.10 and 4.12 and also found during Libraries visit and interview of Library staff that many of the University Libraries in U.P. have not utilizing the grants of INFLIBNET for the purpose for which it has been sanctioned. Hence, the 10th Hypothesis is not supported by the findings of the study.

HYPOTHESIS 11: -

Table no. 4.26 and 4.28 indicates that the status of U.P. University Libraries is very poor regarding IT oriented services. Although INFLIBNET is providing many facilities regarding this but the University Libraries are not using them fully. Thus the Hypothesis no. 11 is disproved by the findings of the study.

HYPOTHESIS 12: -

The Hypothesis no. 12 is supported by the findings of the study that INFLIBNET is working as the national network in the true sense.

HYPOTHESIS 13: -

The conclusion of the present study indicates that INFLIBNET has created awareness among libraries, so the Hypothesis no. 13 is supported by the findings of the study.

HYPOTHESIS 14: -

Table no. 4.14 indicates that some Libraries are following the standards of INFLIBNET and some not, so this Hypothesis is partially accepted and partially rejected.

HYPOTHESIS 15: -

The findings of this study supports Hypothesis number 15 it is evident from figure no. 5.15-5.22 and table no. 4.17, 4.18 (a) and 4.18 (b).

HYPOTHESIS 16: -

Table no. 4.17 shows that INFLIBNET is very helpful for Library resource sharing so the findings of the study support Hypothesis no.16.

HYPOTHESIS 17: -

The INFLIBNET programme is wholly meant for University Libraries. The table no. 4.11, 4.13, 4.18, 4.19 and figure no. 1.2 reveals that University Libraries are not playing their role adequately so this Hypothesis remains partially accepted.

HYPOTHESIS 18: -

The success of INFLIBNET programme is based upon participation and coordination of University Libraries so this Hypothesis remains proved with the findings of the study.

(6.2). SUGGESTIONS: -

In order to achieve over all development of INFLIBNET programme and to provide best services to users, number of initiatives should be implemented at the libraries and rest at INFLIBNET: -

(1). INFLIBNET should provide SOUL free of cost to the libraries participating in the programme, for creation of databases. This software is sufficient enough to take care of the requirements for creating

bibliographic records as per the standards and also adheres to ISO 2709 format.

(2). Involve trained manpower and professional staff for capturing the data in order to maintain the quality as per the given standards.

(3). Libraries should contribute the records on a regular basis to INFLIBNET thereby honoring the MOU signed.

(4). It is found that most of the software's are not able to deal with the multilingual documents not even SOUL is very efficient. SOUL needs to be improved.

(5). Computerisation of library services requires regular up gradation of hardware and software needs maintenance and up gradation as per requirement on regular basis, ignorance of up gradations creates hindrance in data building work and increases the cost of the programme.

A separate grant should be provided to the University Libraries for the up gradation of systems and software's as and when it is required.

(6). Libraries should interact with INFLIBNET on regular basis for any difficulties, clarifications etc. and follow the guidelines or reports to shortcomings in the data from time to time.

(7). INFLIBNET should start teleconferencing facility for its participating University Libraries. Teleconferencing through satellite is an interacting system capable of one-way video and two audio

communications in real time. This will provide a forum to the professionals of participating libraries to interact with INFLIBNET head quarters located at Ahmedabad. Many of the practical problems faced by professionals in library automation, retrospective conversion of data, creation of database, networking techniques could be solved on-site. This will no doubt solve their problems and clarify doubts.

(8). Persons, who are not computer expert, should not be appointed as librarians. In most of the libraries, librarians are not familiar with the computers as they were appointed several years back and at that time computers are not in use in the field of Library Science. It is suggested that more emphasis has been given on the training of such senior librarians, and in any case, librarians should not be appointed without computer knowledge.

(9). The post of Information scientist has been sanctioned by the UGC but the Universities are not filling it, Universities are advised to fill up the post on priority basis and Information scientist should be highly qualified in computers.

(10). On-site training programme should be given top priority, this will be economic and INFLIBNET will be able to interact directly with the concerned library. Many other problems related to networking, software, systems and database building could be solved during the same visit.

(11). It is very urgent and important that the authorities of the Universities should recognize the importance of resource sharing, library networks etc. Regular meetings between Universities authorities and librarians should be insisted as the primary step for the development of INFLIBNET.

(12). A separate website should be made available to all University Libraries.

(13). There must be a separate committee to plan, implement and supervise the INFLIBNET programme at the University level to observe the progress whether things are going in the right direction or not.

(14). The librarians should submit the audited accounts every year along with the progress report for review.

(15). The Internet facility if properly utilised could also be made a source, though limited, for generating income for the library.

(16). The problem of Internet connectivity can be solved if the UGC provides the VSAT connectivity on priority basis for which an outdoor unit dish, personal Earth station, router etc. are required.

(17). A lot of work is to be done to promote resource sharing. Libraries has not shown interest in providing Inter library loan to the other libraries participating in INFLIBNET programme, that is the most important factor of networking. INFLIBNET should recommend some guidelines in this context and that should be followed strictly.

(18). Necessary arrangement should be made for uninterrupted power supply so that service can be provided to the users in full swing.

(19). Users should be educated on regular basis about the services provided by INFLIBNET.

(20). Services rendered should be made more user friendly so that users can get maximum benefit from the same.

(21). Adequate computers should be installed in the library proportionately with the number of its users.

(22). Necessary arrangement should be made to improve the speed of Internet so that downloading of e-resources can be done in time.

(23). Internet service should be made available regularly.

(24). Efforts should be made to avail the full text of the documents to the users.

(25). Once the database creation work is over, there is every need to provide continuous service to users. Hence, one "Information scientist" and one "Computer assistant" are essential for proper maintenance and up keeping of the computer lab, in University Libraries. Therefore the above posts may be sanctioned by the UGC, for the libraries who are offering the services viz. E-mail, Internet, CD-ROM service to users.

(26). Irregular power supply should be corrected by installing high capacity 5KVA or more powerful UPS with stabilizer to sub stain data entry work.

(27). Remuneration of data entry should be enhanced so that the qualified professionals for part time data entry work may be available.

(28). State Universities should take necessary steps for regularization of the post of Information scientist.

(29). Although INFLIBNET has introduced regional training called "INFLIBNET Regional Training Programme in Library Automation (IRTPLA)" for the library professionals working in a particular region, but Universities are not deputing its library staff compulsorily. Therefore it is suggested that maximum number of library staff should be deputed for attending short and long term training programme being organized by INFLIBNET, NISCAIR, ILA, IASLIC and other University or Institutions for giving maximum exposure to work in IT environment.

(30). UGC and INFLIBNET should take care of timely release of fund for data support maintenance and salary of Information scientist.

(31). Non-Professionals should not be appointed as librarian.

(32). The total amount sanctioned for INFLIBNET programme should be kept in a separate account instead of keeping it in the University general account.

(33). It is also necessary to provide some recurring grant to meet the paper, floppies, cartridges, repairs, replacements and spare parts of computers. Provision for AMC (Annual Maintenance Contract) is also necessary.

(34). Hardware and Software (including library application software) should be acquired as per the latest configuration and with high storage capacity.

(35). Involve trained manpower for capturing the data and professional at senior level, to authenticate further the entered data, in order to maintain quality as per the given standards.

(36). Authentication of the records will have to be handled by the respective University rather than expecting INFLIBNET to handle it.

(37). Use the GIST technology for creating the database of regional language collection.

(38). Use extensively these databases hosted on INFLIBNET servers and provide your suggestions, there by contributing to the quality of database.

(39). Librarian should motivate their existing professional staff for database building work and they should be paid on per entry basis from the grant allocated for the purpose. This will give enthusiasm, motivation to the staff and will reduce the errors in the database, which can be committed by the non-professional data entry operator engaged by the private party on contract basis. This will help a lot to INFLIBNET to mount database easily on union database and this work will be finished speedily. This will also make the staff expert in operation of the library software in use.

(40). Two major problem areas for developing library networks is to develop requisite infrastructure facilities at individual libraries and impart sufficient training to staff to handle computer and communication facilities. The libraries will have to develop such infrastructure to access tremendously growing electronic information resources. The existing library staff is not only required to be trained to be educated that the mission of providing right information to the right person at the right time and at the right place.

(41). Instead of providing assistance in terms of grants, systems and software should be provided directly to the librarian from the vendor or UGC with specifications. This will help librarians a lot and they will not depend on the V.C., Director, Finance Officer and Registrar for approval and sanction to purchase.

(42). Wherever possible have collaboration with similar networks and take the benefit of their expertise and resources.

(43). Some Universities could not utilize the funds for various reasons under non-recurring grants. They may be allowed to spend un-utilised grants in the next two years as a special case.

(44). Create authority files for Indian names and subjects as supplemented to L.C authority files to help in maintaining consistency in the records.

(45). Promote the resource sharing activities such as Inter-library-loan, Document Delivery Service, Copy Cataloguing, Retrocon, Collection

Development, etc. to take maximum benefit of these union databases.

(46). Cover more libraries particularly Deemed University Libraries, Agricultural University Libraries and R&D Libraries and also the types of material to be covered.

(47). Arrange refresher kind of courses to up date the knowledge in the field for those trained.

(48). SOUL demo may be arranged for Universities before purchase.

(49). Training on Subject headings, AACR-2 etc. required.

(50). Standards for Expert and Project databases.

(51). Latest information of IT related literature to be provided on INFLIBNET website.

(52). There is a need to formulate guidelines, norms and standards for automation, networking and information processing which should be adopted by all the academic libraries.

(53). Academic Libraries of the state should plan their own Library Network for mutual benefits as per requirements and needs of the state in addition of sharing other networks and consortia.

(54). Digitization lab should be established by the pooling resources from UGC and other funding agencies in the state to initiate digitization process on sharing basis.

(6.3). SUGGESTIONS FOR FUTURE RESEARCH: -

The present study concentrated on "**Impact of INFLIBNET programme on IT oriented services in Uttar Pradesh State Universities: An Evaluative Study".** The study was delimited to the state universities of U.P only. Keeping this delimitation in view, a number of suggestions can be put forward for future research in the area: -

(1). A more comprehensive sample of libraries should be taken by including more libraries from same state and other states.

(2). There is a vast scope of future research on all the participating libraries of INFLIBNET.

(3). More research is required to be conducted regarding effectiveness and efficiency of INFLIBNET.

(4). A detailed investigation regarding the services provided by the university libraries can be conducted so as to establish the standards of the services to be provided.

(5). A study may be carried out to find the suitability of various Software packages available for use in Libraries.

(6). Many similar researches are required to be conducted on the topic of INFLIBNET following different attributes and characteristics viz. training, consortium, staff, standards etc.

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APPENDICES

QUESTIONNAIRE

RESEARCH TITLE: IMPACT OF INFLIBNET PROGRAMME ON IT ORIENTED SERVICES IN UTTAR PRADESH STATE UNIVERSITIES: AN EVALUATIVE STUDY

QUESTIONNAIRE TO LIBRARIANS

To,

The Librarian

_____

_____

Dear Sir/Madam,

It gives me immense pleasure to write to inform you that **Ms.Archana Upadhyay Lecturer, Deptt. Of Library and Information Science, CSJM University, Kanpur** has been conducting research under my supervision on the topic.

The enclosed questionnaire is been sent to you with a request that the same may please be filled up and returned to Ms.Archana Upadhyay at the following address.

Your kind response and support would definitely help her complete the survey relating to the topic. The data supplied by you will be used for the research purpose only.

An early response is solicited.

With regards.

Yours Sincerely,

Prof.M.T.M.Khan.

(Head, Deptt. of Library & Inf. Sc.

Bundelkhand University, Jhansi, U.P.)

Archana Upadhyay.

C-14, Ras Bahar Colony-I,

Nandanpura,

Jhansi-284003.

U.P.

Research Topic: **"Impact of INFLIBNET Programme on IT Oriented Services in Uttar Pradesh State Universities: An Evaluative Study".**

QUESTIONNAIRE

Note: - (i). The questions can be answered by putting a tick mark in the appropriate box. However some of the questions require filling up the information.

(ii). In case, the space provided for an open-ended question is insufficient extra sheet may please be used.

(1). GENERAL INFORMATION

(1.1). Name and year of establishment of the University

Name: _____

_____ Year: _____

(1.2). Name and year of establishment of the Library

Name: _____

_____ Year: _____

(1.3). Incharge of Library

Librarian	☐
Dy. Librarian	☐
Asst. Librarian	☐
Other	☐

Name of the Librarian _____

(1.4). Professional Experience _____ Years.

(1.5). Qualifications

NET/SLET	☐
Ph.D In Lib.Sc.	☐
M.Lib.Sc.	☐
M.Phil	☐
PG in other Subject	☐
PGDCA	☐
Ph.D In other Subject	☐
Any Other	☐

(1.6). Address _____

_____ Pin Code _____

(1.7). Contact Number _____

(2). Budget

(2.1). Total budget of the institution/budget of the library

Financial Year	Budget of the Institution	Budget of the Library
2001-02		
2002-03		
2003-04		
2004-05		

(2.2). What are the sources of income

UGC		State Government	
Fee &No Dues		Donations	

(2.3). Mention the details of allocation of Grants

S.No.	Source	Grant Received		
		8th	9th	10th
1	UGC			
2	State Government			
3	Any Other			

(2.4). Have you utilised full grant within time in

8^{th} plan	Yes		No	
9^{th} plan	Yes		No	

(3). Users

Total number of users

Categories of Users	2001-02	2002-03	2003-04	2004-05
Faculty				
Researchers				
Students				
Administrative Staff				
Technical Staff				
Others				
Total				

(4). Staff

S. No.	Section	Number of Staff		
		Professional	Semi-Professional	Non-Professional
1	Acquisition Section			
2	Circulation Section			
3	Reference Section			
4	Periodical Section			
5	Maintenance Section			
6	Technical Section			
7	Information Services Section			

(5). INFLIBNET DATA

(5.1). Is your library linked with INFLIBNET

Yes ☐ No ☐

If Yes when _____

(5.2). If Yes, how much grant you have received under

9th plan _____

10th plan _____

(5.3). Allocation of fund in Information Technology

Sufficient ☐

Not Sufficient ☐

(5.4). Is your library is participating in UGC Consortium

Yes ☐ No ☐

(5.5). Have your library filled the Information Scientist post of INFLIBNET

Yes ☐ No ☐

(5.6). Is your library participating in INFONET

Yes ☐ No ☐

(5.7). Does your Staff participate in INFLIBNET training programme

Yes ☐ No ☐

(5.8). Is your library using INFLIBNET Software for library automation

Yes ☐ No ☐

If yes, please specify

SOUL ☐

ILMS ☐

Any other (In house development with INFLIBNET aid) ☐

(5.9). Is your library, using SEWAK (INFLIBNET E-mail service)

Yes ☐ No ☐

(5.10). Total data added to INFLIBNET database by your University (Please mention it category wise).

_____

_____

_____

_____

(5.11). Has your staff ever participated in Caliber

Yes ☐ No ☐

If yes please mention their details

_____

_____

(5.12). Give a comparative table of services before and after it.

S.No.	Before	After
(1).		
(2).		
(3).		
(4).		
(5).		
(6).		
(7).		
(8).		
(9).		
(10).		

(Please do not repeat services in "After" column only write about new services).

(5.13). Contribution of INFLIBN in the development of the library

_____

_____

_____

(5.14). Change in the scene before and after INFLIBNET help

_____

_____

_____

(6). COMPUTERISATION

(6.1). Year of computerisation of the library _____

(6.2). Number of computers in the library _____

(6.3). Please mention the purpose for which the computer is being used

(a). House Keeping Job's Yes ☐ No ☐

(b). Reader's Services Yes ☐ No ☐

(c). Management Support Activities Yes ☐ No ☐

(d). Any Other (Please Specify) _____

_____

(6.4). If Computer is being used for house keeping job's, then indicate what categories of jobs are performed

(a). Acquisition Yes ☐ No ☐

(b). Cataloguing Yes ☐ No ☐

(c). Circulation Control Yes ☐ No ☐

(d). Serial Control Yes ☐ No ☐

(e). Journal Indexing Yes ☐ No ☐

(f). Stock Verification Yes ☐ No ☐

(g). Any other (Please Specify) _____

_____

(6.5). If computer is being used for reader's services, indicate as to what kinds of computerized services being offered

(a). CAS Yes ☐ No ☐

(b). SDI Yes ☐ No ☐

(c). Database Searches Yes ☐ No ☐

(d). Bibliographic Services Yes ☐ No ☐

(e). Union Catalogue Access Yes ☐ No ☐

(f). Article Delivery Service Yes ☐ No ☐

(g). Any other (Please Specify) _____

_____

(6.6). Does the library facilities for CD-ROM Search?

Yes ☐ No ☐

(6.7). Does the library provide online search facility?

Yes ☐ No ☐

(6.8). Do you have facilities for inter-library networks?

Yes ☐ No ☐

(6.9). Are you subscribing/ willing to subscribe online journal if made available?

Yes ☐ No ☐

If 'NO' please specify the reasons _____

_____

(6.10). Is your have a Local Area Network (LAN)?

Yes ☐ No ☐

(6.11). Is your library possess the following for information dissemination

(a). Telex Yes ☐ No ☐

(b). Fax Yes ☐ No ☐

(c). E-Mail Yes ☐ No ☐

(d). Internet home page Yes ☐ No ☐

(6.12). Does your library have OPAC?

Yes ☐ No ☐

(6.13). Does your use Bar Code / RFID tags for Circulation control?

Yes ☐ No ☐

(6.14). Does your library have Internet facilities?

Yes ☐ No ☐

(6.15). Are you using Internet for providing information to users?

Yes ☐ No ☐

(6.16). Does your library subscribe E-Journals

Yes ☐ No ☐

(6.17). Does your University provide the facility of training course on library automation?

Yes ☐ No ☐

(6.18). How many persons in your library are trained in computer application? _____

(6.19). Number of training courses attended in last five years by the library staff in computer/IT related areas

(a). Professional _____

(b). Semi-Professional _____

(c). Non-Professional _____

(6.20). Does your library have the post of programmer?

Yes ☐ No ☐

If yes please mention the number _____

(6.21). How far IT could be implemented in Libraries?

_____

_____

(6.22). In your view, what would be the impact of IT on the following:

		Positive	Negative	No Effect
(a).	**Library Professionals**			
(i)	Services			
(ii)	Productivity			
(b).	**Library Users**			
(i)	Meeting Demands			
(ii)	Library User Relationship			
(c).	**Information Services**			
(i)	Quality			
(ii)	Quantum of Information			
(d).	**Library as a whole**			
(i)	Usage of library material			
(ii)	Image			
(iii)	Socio Cultural			

(6.23). How do you rate the impact of INFLIBNET on the following services and activities of the library to the user?

Activities		Essential	Necessary	Desirable but not necessary	Not Necessary at all
(a).	Online Search				
(b).	E-Journals				
(c).	Internet				
(d).	Teleconferencing				
(e).	CD-ROM search service				
(f).	Consortium(Resource Sharing)				
(g).	Circulation				
(h).	Cataloguing (OPAC)				
(I).	Automatic indexes & abstracts				

(6.24). How would you evaluate the performance of your library in terms of the following

		Poor	Fair	Good	Excellent	No such service
(a).	Internet					
(b).	E-Mail					
(c).	CD-ROM Search					
(d).	Online Search					
(e).	E-Journals					
(f).	E-Books					
(g).	Database Search					
(h).	Tele & Video Conferencing					
(I).	OPAC					
(j).	Automatic Indexes					
	& Abstracts					

(6.25). Is there any change in users attitude after providing them variety of services with INFLIBNET help?

_____

_____

_____

(7). PLANS, PROBLEMS AND SUGGESTIONS

(7.1). Please mention below the problems faced with regard to IT in your library?

_____

_____

_____

(7.2). What are your future plans and proposals for automation and networking?

_____

_____

_____

(7.3). Give an assessment of Computer application and networking in your library, please mention the salient features (including the unique one's), success and failures if any?

_____

_____

_____

(7.4). Suggestions for INFLIBNET

_____

_____

_____

_____

Name of the person filling up the questionnaire _____

_____

Designation _____ Date _____

Signature and Stamp _____

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